PERCEPTIONS ON THE ROLE OF LOCALLY OWNED SMALL, MEDIUM AND MICRO ENTERPRISES IN THE ECONOMIC DEVELOPMENT OF RUSTENBURG, SOUTH AFRICA

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ABSTRACT

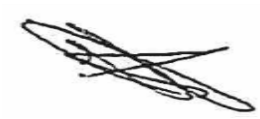
The primary objective of this study was to investigate the perceptions on the role of locally owned small, medium and micro enterprises (SMMEs) in the economic development of Rustenburg, South Africa. The study was motivated by theoretical findings that SMMEs are the cornerstone of economic development; yet, the levels of unemployment and poverty were still escalating in Rustenburg. This prompted the researcher to investigate the perceptions on the role of locally owned small, medium and micro enterprises in the economic development of Rustenburg, South Africa, and the extent of their contribution.

The study adopted a descriptive research design and a quantitative approach to determine the role of SMMEs and the extent of their contribution to the economic development of Rustenburg. The study focused on Rustenburg, which had 223 registered SMMEs at the time. The registered 213 SMMEs were identified as the target population of the study, and 10 registered SMMEs participated in the pilot study. A structured questionnaire was used as a data collection instrument. Two hundred and thirteen (213) copies of questionnaires were self-administered. One hundred and eighty-two (182) completed questionnaires were returned, which represented an 85% response rate. Descriptive and inferential statistics were used to analyse the data by utilising the Statistical Analysis Software (SAS). Statistical techniques used in this study comprised frequency analysis, analysis of variance (ANOVA), Pearson's correlation test, and Tukey's studentised range test.

Empirical findings revealed that SMMEs play a significant role in contributing to the economic development, employment generation and poverty reduction of Rustenburg, with SMMEs in the mining sector making a greater and more significant contribution than other sectors. The study concluded that SMMEs perform a critical role in contributing to the economic development of Rustenburg, especially those in the mining sector. Recommendations were that government should consider increasing the development programmes for SMMEs that operate in Rustenburg, invest in SMMEs' technology and provide practical SMMEs development training. In addition, government should provide sufficient funding for SMMEs and improve the regulatory framework that governs the SMME sector. This particular study focused on SMMEs operating in Rustenburg. Another study could be conducted on foreign-owned SMMEs.

DECLARATION

I, **Samuel John Chiromo**, declare that "Perceptions on the role of locally owned small, medium and micro enterprises in the economic development of Rustenburg, South Africa" is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I have not previously submitted this dissertation for a degree at the University of South Africa (Unisa) or any other university. This dissertation is submitted in fulfilment of the requirements for Master of Commerce Degree in Business Management.



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DECLARATION ON PLAGIARISM

I, **Samuel John Chiromo**, student number **43431542** hereby declare that I am fully aware of the University of South Africa's policy on plagiarism. I have taken every precaution to comply with the regulations.

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I, **Samuel, John Chiromo**, hereby declare that I am fully aware of the University of South Africa's policy on research ethics. I complied with the regulations by obtaining an ethical clearance certificate reference number 2017_CEMS_ESTTL_014.

Signature

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DEDICATION

This dissertation is dedicated to my late father, **Mr John Chiromo** and my daughter, **Diana Chiromo**. May the soul of my late father rest in peace and may God protect Diana Chiromo and give her a prosperous life.

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I would like to take this opportunity to express my gratitude to God for providing me with the academic strength that I utilised to complete this master's degree. I would also like to convey my gratitude to the following individuals for their contribution towards the successful completion of my studies:

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- The SMME owners operating in the Rustenburg area who participated in the study. They sacrificed their own productive time and willingly participated in this study.
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- My friends, for encouraging and supporting me on this academic journey.

May the blessings and love of the good Lord be bestowed upon you all!

'Learning is a treasure that will follow its owners everywhere' – Chinese proverb

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LIST OF ACRONYMS

ANOVA	analysis of variance
BRICS	Brazil, Russia, India, China, and South Africa
CIS	Commonwealth of Independent States
COMCEC	Standing Committee for Economic and Commercial Cooperation of the Organisation of the Islamic Cooperation
EG	Edinburgh Group
EU	European Union
GDP	gross domestic product
GEM	Global Entrepreneurship Monitor
GML	general linear model
GNI	gross national income
GPI	Genuine Progress Indicator
GRI	Global Reporting Initiative
HDI	Human Development Index
HSD	honestly significant difference
ILO	International Labour Organisation
KMO	Kaiser–Meyer–Olkin
NCR	National Credit Regulator
OECD	Organisation for Economic Co-operation and Development
PQLI	Physical Quality of Life Index
SAM	Social Accounting Matrices
SAS	Statistical Analysis Software
SBA	Small Business Administration
SEDA	Small Enterprise Development Agency
SME	small and medium enterprises
SMMEs	small, medium and micro enterprises
SNA	System of National Accounts
Stats SA	Statistics South Africa

UIF	Unemployment Insurance Funds
UK	United Kingdom
UNDP	United Nations Development Programme
Unisa	University of South Africa
USA	United States of America

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CHAPTER 1

INTRODUCTION TO THE STUDY

1.1 INTRODUCTION

This chapter provides insights into the factors that necessitated this study. It contains the following: introduction to the study, background of the study, problem statement, purpose of the study, primary research objective, secondary research objectives, main research question and research sub-questions. The chapter also presents the significance of the study, delimitations and limitations of the study and assumptions of the study. Furthermore, the chapter provides definitions of key terms and abbreviations, layout of the rest of the study, and a chapter summary.

1.2 INTRODUCTION TO THE STUDY

Small, medium and micro-enterprises (SMMEs) are viewed as the cornerstones of economic development, because they create employment and reduce poverty (Opafunso & Adepoju, 2014:115; Sobrinho, 2016:1; Urban & Naidoo, 2012:147). Countries such as China, the United Kingdom (UK) and the United States of America (USA) that promote SMMEs, have made remarkable progress in terms of employment creation and poverty reduction (Sobrinho, 2016:1). As a result, governments internationally and locally, have been focusing on supporting SMMEs as a strategy to achieve economic development (Bouazza, 2015:1). The South African government has also put measures in place to promote the SMME sector, with the intention of enhancing the achievement of sustainable economic development (Maloka, 2013:1).

According to Ladzani and Seeletse (2012:89), 99% of registered businesses in developed countries are SMMEs, and these businesses contribute more than 80% of the global gross domestic product (GDP) (Dubihlela & Dhurup, 2013:1332). For example, in the United States, SMMEs contribute half of its non-farm private GDP, as well as 75% of new job opportunities (Ilegbinosa & Jumbo, 2015:203). In the United Kingdom, SMMEs account for 99.9% of all private sector businesses and create 59.3% of employment in this sector (UK SME Landscape and Standardisation Research report, 2014:7).

SMMEs enhance the rate of economic growth in developing countries and contribute to the achievement of the growth objectives of these countries, because they are able to adapt more easily to market conditions than their large-scale competitors (Bouazza, 2015:5; Opafunso & Adepoju,

2014:115; Snyman, Kennon, Schutte & Von Leipzig, 2014:165;). Furthermore, in developing countries, 50% of employment and GDP are contributed by SMMEs (Muriithi, 2017:37; National Credit Regulator [NCR], 2011:7).

According to Wonglimpiyarat (2015:295), China is recognised as one of the economies in the world with the highest growth rate. The SMME sector is identified as a key role player in the economy of China, as this sector contributes 60% of its GDP, as well as creates 80% of the jobs in the country. In Ghana, 92% of businesses are SMMEs and they contribute about 75% of the GDP of Ghana (Akorsu & Agyapong, 2012:138). In Nigeria, about 45% of job opportunities are contributed by SMMEs (Taiwo, Falohun & Agwu, 2016:37). According to the NCR (2011:7) and Labuschagne (2015:1), 90% of registered businesses in South Africa are SMMEs and they contribute about 57% of the GDP and provide about 61% of employment.

Although SMMEs contribute to economic development by creating employment, the level of unemployment in South Africa is escalating every year despite the effort that the government exerts in supporting SMMEs (Lekhanya, 2015:413). According to Business Environment Specialist Report (2015:1), contrary to the global trends where SMMEs constitute the largest employers in the world, SMMEs in South Africa are showing stagnation in employment creation. Small Enterprise Development Agency (SEDA) is mandated by the government to promote economic development through the support of SMMEs in South Africa (SEDA, 2015:31; SEDA, 2016:35), but still unemployment is high in the country (Lekhanya, 2015:413; Maloka, 2013:1).

1.3 BACKGROUND OF THE STUDY

South Africa is faced with a serious dilemma of an increase in the level of unemployment and poverty, and the negative impact these variables have on the economic development of the country (Lekhanya, 2015:413; Maloka, 2013:1). According to Oluwajobu, Blaauw, Greyling and Kleynhans (2015:3), the factors that cause high unemployment in South Africa include a lack of skills such as intellectual ability, workplace skills as well as the ability to apply knowledge acquired from school. In addition to these factors, low levels of entrepreneurship and slow growth of SMMEs have been consistently identified as the major causes of unemployment in South Africa (eThekwini Municipality, 2013:13).

Rustenburg Local Municipality, which is one of the five municipalities in the Bojanala District Municipality in the province of Northwest, is also experiencing similar challenges. Having a total

population of 581 000 people, about 162 000 of them are estimated to be living in poverty and 52 200 of that population is unemployed. The number of unemployed people in the Rustenburg Local Municipality represents an unemployment rate of 20.9% of the people who are actively looking for employment in this area (Rustenburg Development Plan Review, 2016:2). The unemployment rate of Bojanala District is estimated to be 24.5% and the total number of unemployed people in Rustenburg constitutes 37.32% of the total number of unemployed people in Bojanala District Municipality. Although Rustenburg Municipality is responsible for more than 65% of local GDP and 50% of all direct jobs, through its platinum mining industry, the number of unemployed people is increasing by an average annual rate of 2.80%. This figure is higher than that of the Bojanala District Municipality, which has an average annual increase in unemployment of 0.94% (Rustenburg Development Plan Review, 2016:54). Against this background, there is a need to determine the extent to which SMMEs contribute to the creation of employment and reduction of poverty in the Rustenburg Local Municipality, as SMMEs are regarded as alternative providers of employment (Opafunso & Adepoju, 2014:115).

Maloka (2013) and Lekhanya (2015) have conducted studies on the contribution by SMMEs to the economic development of South Africa in general. However, there are limited studies regarding SMMEs' contribution to the economic development of the Rustenburg Local Municipality in particular. Although Hlahane (2013) conducted a study on SMMEs in Rustenburg, it only focused on the factors that sustain SMMEs, but did not relate to the role of SMMEs on the economic development in the province. Lekhanya's (2015) study on the public outlook on SMMEs as a strategic tool for economic growth and job creation in South Africa reaffirmed that SMMEs contribute to economic growth and job creation in South Africa. However, Lekhanya's study was limited to four provinces of South Africa, and it is indicated in the study that it is not appropriate to generalise the findings to other provinces of the country. It is rather suggested that studies should be conducted in other provinces of South Africa. The current study was conducted in Rustenburg to assess the contribution of SMMEs to the economic development owing to the dearth of similar research studies in Rustenburg.

Other studies on how SMMEs contribute to economic development in South Africa differ from the current one in the following ways. Studies conducted by Ayandibu and Houghton (2017) and Booyens (2011) in Durban and Cape Town respectively, demonstrated that SMMEs contribute to the creation of employment, poverty reduction and promotion of innovation. However, the findings

of these studies were based only on literature reviewed. As a result, there were no empirical findings. To address this knowledge gap, this study used both literature and empirical studies to determine the role of SMMEs in economic development.

Kongolo (2010) conducted an empirical study of the role of SMMEs in economic development in Durban and Johannesburg. The findings indicated that SMMEs contribute to economic development by creating employment and improving GDP. However, the study only focused on employment and GDP as the only measures of economic development, yet measures such as poverty, redistribution of income and innovation were ignored. This study integrated poverty, redistribution of income, innovation, and GDP as measures of economic development. Although this study focused on employment generation and poverty reduction as key measures of economic development, to ensure its validity, other measures of economic development such as income, innovation, GDP and social aspects of economic development have also been used.

Masuku and Selepe (2017) also conducted a study on how SMMEs promote local economic development in the Umlazi Local Municipality of KwaZulu-Natal. Findings revealed that SMMEs promote local economic development by creating employment, reducing poverty, improving GDP, and promoting innovation. However, social measures of economic development such as provision of access to education and health care were ignored. Unlike the study of Masuku and Selepe (2017), this study integrated social measures of economic development, such as education and health care to determine whether SMMEs also contribute to social aspects of economic development.

Maloka (2013) also conducted a study on the contribution of SMMEs towards local economic development in Mankweng Township of Limpopo. The findings revealed that SMMEs indeed contribute to local economic development of Mankweng Township by providing income, creating employment, reducing poverty, promoting innovation, and the redistribution of income. The study used a questionnaire as a data collection instrument. However, the questionnaire did not collect data on the types of employment that SMMEs create, and how SMMEs contribute to the reduction of poverty. To address these shortcomings, the questionnaire for this study incorporates components that collect data on the types of employment that SMMEs create, and how SMMEs contribute to poverty reduction in the area.

Although this study focuses on Rustenburg Municipality only, in terms of size of the area of focus, the size is larger than of those studies that did not yield the intended results. As indicated in Figure 1:1 below, Rustenburg Local Municipality accounts for a total population of 37.0% of the total population of Bojanala District, ranked as the most populous local municipality.

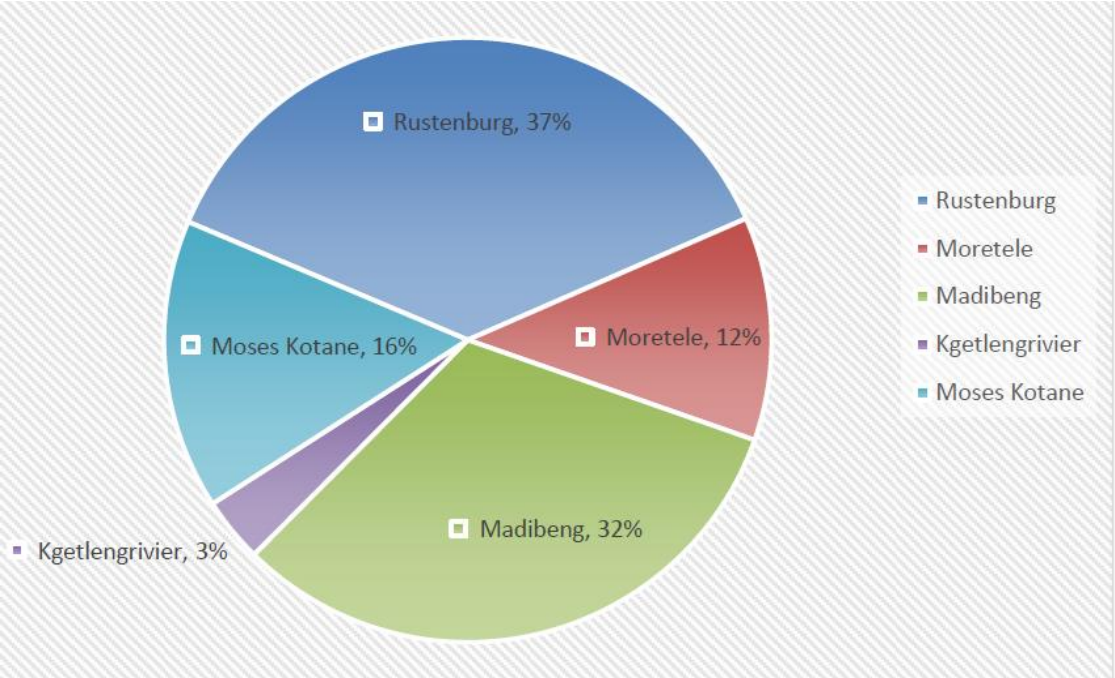

Figure 1:1: Total population (Bojanala District Municipality, 2013)

Source: Rustenburg Development Plan Review (2016:21).

1.4 PROBLEM STATEMENT

According to Urban and Naidoo (2012:147), SMMEs are the main contributors to local economic development, and as such are regarded as instruments to solve socio-economic problems, since they act as catalysts for economic activities. Having acknowledged the contribution of SMMEs to economic development, the South African government has been focusing on implementing programmes to promote SMMEs in order to reduce unemployment and poverty (Lekhanya, 2015:413). Even the mines around Rustenburg invested R12 million in the development programmes of SMMEs over the last three years in order to sustain SMMEs in the Rustenburg Local Municipality (Eunomix Research, 2016:10). However, the levels of unemployment and

poverty are still high in Rustenburg (Statistics South Africa [Stats SA], 2016:8; Rustenburg Development Plan Review, 2016:2). It was against this background that this study sought to investigate the role of SMMEs in the economic development of Rustenburg Municipality and the extent of their contribution.

1.5 PURPOSE OF THE STUDY

The purpose of the study was to investigate the role of SMMEs in the economic development of the Rustenburg Local Municipality with the aim of determining the extent to which SMMEs contribute to economic development in this area. Government institutions could use the results of this study to review and improve policies that govern the SMME sector. The study would also motivate entrepreneurs to enhance their entrepreneurial activities, by adopting the recommendations suggested by the study.

1.6 PRIMARY RESEARCH OBJECTIVE

The primary objective of this study was to investigate the perceptions of the role of locally owned small, medium and micro-enterprises (SMMEs) in the economic development of the Rustenburg Local Municipality.

1.7 SECONDARY RESEARCH OBJECTIVES

In order fully to examine the primary objective, the following secondary objectives were addressed, namely to –

- investigate the activities of SMMEs in the Rustenburg Local Municipality;
- determine the extent to which SMMEs contribute to employment generation in the Rustenburg Local Municipality; and
- identify the extent to which SMMEs contribute to poverty reduction in the Rustenburg Local Municipality.

1.8 MAIN RESEARCH QUESTION

The main research question addressed in this study was:

> *What is the role of SMMEs in the economic development of the Rustenburg Local Municipality?*

1.9 RESEARCH SUB-QUESTIONS

Based on the research questions above, the following research sub-questions were proposed.

- What are the activities conducted by SMMEs in the Rustenburg Local Municipality?
- To which extent do SMMEs contribute to employment generation in the Rustenburg Local Municipality?
- To which extent do SMMEs contribute to poverty reduction in the Rustenburg Local Municipality?

1.10 SIGNIFICANCE OF THE STUDY

This study sought to compliment other studies on the role of SMMEs in economic development by determining the extent to which these SMMEs have contributed to economic development in South Africa. Although studies on the role of SMMEs in economic development were conducted in South Africa, few studies have tested the extent to which these SMMEs contribute to economic development. Unlike those studies, the current study integrated other measures of economic development that were ignored in previous studies. Therefore, this study facilitated the synthesis of existing studies and assists in addressing the gaps in the existing studies.

The study is likely to attract interest and attention from many stakeholders, which include government institutions and business owners (entrepreneurs), as it highlights the significant roles that SMMEs play in alleviating poverty and generating employment opportunities. Hence, government institutions may use the study to review and improve policies that govern the SMME sector. The study also motivates entrepreneurs to enhance their entrepreneurial activities, by adopting the recommendations suggested by the study.

1.11 DELIMITATIONS OF THE STUDY

The study was limited to SMMEs registered with the Rustenburg Local Municipality. The Rustenburg Local Municipality is a category B Municipal Council, consisting of 38 wards. It is located in the eastern part of the North West (Rustenburg Development Plan Review, 2015–2016).

1.12 LIMITATIONS OF THE STUDY

This study, like any other research, has some limitations. Firstly, some of the respondents were unwilling to complete the questionnaires due to fear that their confidential information might be linked to that of their competitors. To address this limitation, it was indicated on the cover page of

the questionnaire that the information provided by the respondents would be used for research purposes only and that it would be treated with confidentiality.

The study did not reach all areas surrounding the Rustenburg Local Municipality owing to time and funding constraints. To ensure sufficient time to conduct the study, the researcher, as an employee of an academic institution, utilised his study leave entitlement. In addition, the researcher had some access to the University of South Africa (Unisa) Postgraduate Fellowship Funds, some of which he used to address the funding limitation of the study.

1.13 ASSUMPTIONS OF THE STUDY

According to Patidar (2013:3), assumptions are statements that are taken for granted or are considered true, even though they have not been scientifically tested. These statements are accepted as being true, based on logic or reasons, but without proof or verification. Marilyn (2011:1) asserts that assumptions are sometimes things that the study would not control and once they disappear, the study becomes irrelevant.

This study assumed that SMMEs would continue to contribute to economic development as many scholars (Opafunso & Adepoju, 2014:115; Sobrinho, 2016:1; Urban & Naidoo, 2012:147) have cited this assumption. The study preserved anonymity and confidentiality and thereby assumed that the participants would complete the questionnaires faithfully.

1.14 DEFINITIONS OF KEY TERMS AND ABBREVIATIONS

In this section, definitions of key terms used in this study are provided.

1.14.1 SMEs and SMMEs

The abbreviations ‘SMEs’ and ‘SMMEs’ are used interchangeably in South Africa. The repeated letter ‘M’ means ‘micro-enterprises’, which comprises informal businesses managed by one owner and some family members. These businesses employ no more than five salaried employees. The value of their turnover and gross assets does not exceed R150 000 and R100 000 respectively (Radipere, 2012:15). According to South African National Small Business Act as cited by NCR (2011:25), SMMEs are defined as provided in Table 1.1 below.

Table 1.1: Broad definitions of SMMEs in the National Small Business Act No. 102 of 1996

Enterprise size	Number of employees	Annual turnover (SA rand)	Gross assets, excluding fixed property
Medium	Fewer than 100 to 200, depending on the industry	Less than R4 million up to R50 million depending on the industry	Less than R2 m to R18 m depending on the industry
Small	Fewer than 50	Less than R2 million to R25 million depending on the industry	Less than R2 million to R4.5 million depending on the industry
Very Small	Fewer than 10 to 20 depending on the industry	Less than R200 000 to R500 000 depending on the industry	Less than R150 000 to R500 000 depending on the industry
Micro	Fewer than 5	Less than R150 000	Less than R100 000

Source: NCR (2011:25)

In this study, the definition of SMMEs was used according to the National Small Business Act No.102 of 1996. The reason for choosing this definition was that the study would be conducted within the context of South Africa and these businesses are registered and can be traced.

1.14.2 Economic development

Economic development is defined as the qualitative change in the society in general, such as improvement in the quality of life. This process involves the raising of people's living standards in terms of per capita income, as well as the level of consumption and giving access to services like education and health care. It also involves the establishment of conditions conducive to the growth of people's self-esteem as well as the escalation of people's freedom in terms of giving them a diversity of goods and services (Mohr, 2014:521; Todaro & Smith, 2015:7).

1.14.3 Unemployment

Unemployment takes place when a person who is actively looking for employment is unable to find work. The definition of unemployment is based on three criteria, namely 'without work', 'presently available for work' and 'looking for work'. To be 'without work' means that an individual is not in any form of employment where he or she can be remunerated. The criterion of 'presently available for work' means that an individual must avail himself for a job during the reference duration. If the individual is 'looking for work', it means he or she must take an active

step of looking for employment, for example, through applying to advertised jobs (Mncayi, 2016:12; Posel, Casale & Vermaak, 2014:28).

1.14.4 Poverty

The term 'poverty' is described as the deprivation, social exclusion and inequality in the distribution of resources. Poverty is defined based on three criteria. Firstly, poverty is defined as the situation of being unable to meet basic material needs, which include food, water, clothing, shelter, education and health. Secondly, poverty is conceptualised from the environmental point of view. Therefore, poverty is the situation of being unable to meet environmental requirements such as clean air, serenity and arts. Thirdly, poverty is described as the situation of being unable to meet needs that are not material such as political and community participation, identity and dignity (Cobbinah, Black & Thwaites, 2013:25; Umaru & Tende, 2013:1583).

1.15 LAYOUT OF THE REST OF THE STUDY

Chapter 2: Literature review

The chapter presents the background and nature of SMMEs in both developed and developing economies. The concept of economic development was discussed. The chapter further presented the role of SMMEs from economic development theoretical perspectives, as well as the measurement and benefits of economic development. In this chapter, the nature of unemployment was examined, by covering the definitions of unemployment, its types and measurements, as well as its influence on economic development globally. The nature of poverty was investigated which included the definition of poverty and the methods of measuring poverty, as well as its impact on economic development globally. The chapter also presented the role of SMMEs in the economic development from the empirical perspectives.

Chapter 3: Research methodology

This chapter describes the research methodology employed in gathering information of the role of SMMEs in economic development in Rustenburg. The chapter also included the research design, population, sampling method and sample size, data collection instruments, data analysis methods, sources of data, validity and reliability, and ethical considerations of the study.

Chapter 4: Research results

This chapter presents, discusses, analyses, and synthesises empirical findings in line with the literature review.

Chapter 5: Conclusion and recommendations

This chapter presents the summaries, conclusions, contribution of the study, achievement of research objectives, limitations of the study, recommendations, and areas for further study.

1.16 CHAPTER SUMMARY

Chapter 1 gave insights into the factors that necessitated this study by providing the introduction and background to the study. The problem statement, the purpose of the study, research objectives and research questions were also presented. This was followed by the discussion of the study, its significance, delimitations and limitations. The chapter further explained the assumptions of the study; and provided the definitions of key terms and abbreviations. Finally, it gave the layout of the rest of the study. Chapter 2 critically discusses and interrogates a literature review of the role of SMMEs on economic development.

CHAPTER 2

LITERATURE REVIEW ON THE NATURE OF SMMEs AND ECONOMIC DEVELOPMENT

2.1 INTRODUCTION

This chapter contains the literature review, which is aimed at guiding the study on the nature of SMMEs, as well as the role that SMMEs play in economic development. The chapter is divided into six sections. In section 2.2, the background and nature of SMMEs in both developed and developing economies are discussed. Section 2.3 explains the concept of economic development. Section 2.4 discusses the role of SMMEs from economic development theoretical perspectives, as well as measurement and benefits of economic development. In section 2.5, the nature of unemployment is examined. This examination covers the definitions of unemployment, the types and measurements of unemployment, as well as the influence of unemployment on economic development globally. In section 2.6 on the nature of, the definition of poverty and the methods of measuring poverty, as well as the effect of poverty on economic development globally are presented. In section 2.7, the role of SMMEs on the economic development from the empirical perspectives is discussed. This section explains how SMMEs contribute to economic development globally. Section 2.8 comprises the conclusion of the chapter in which the above sections are analysed and the concluding remarks are made.

2.2 THE BACKGROUND AND NATURE OF SMMEs

Scholars such as Chimucheka and Mandipaka (2015), Avevor (2016) and Muriithi (2017) concur that SMMEs play similar roles in various countries and are the important drivers of sustainable economic development. SMMEs create jobs and therefore reduce poverty (Global Entrepreneurship Monitor [GEM] 2017:26). Consequently, the South African government has been focusing on promoting SMMEs through the implementation of SMME policies and development programmes. One of the well-known policy documents on SMMEs that the government implemented is the White Paper of 1995. This policy document indicates the need for government to facilitate SMMEs' access to information, to promote procurement from SMMEs, and to improve SMMEs' access to finance and affordable physical infrastructure (Amra, Hlatshwayo & McMillan, 2013:3).

Despite the similarities in the roles that SMMEs play in various economies, coming up with a universal definition of SMMEs remains a challenge globally (Buculescu, 2013:105). The definition of SMMEs differs from one country to another. The criteria for defining SMMEs are mainly based on the levels of capitalisation, sales turnover and employment, which differ from country to country (Buculescu, 2013:105; Muriithi, 2017:37). Therefore, countries with improved economies such as the United Kingdom and the United States use higher values of capitalisation, annual sales turnover and number of employees than developing countries, such as Nigeria and South Africa (Hefer, Cant & Wiid, 2015; NCR, 2011:23). There is no universal definition of SMMEs. Therefore, it is imperative to provide a definition of SMMEs owing to the usefulness of such a definition in preparing statistics, and in the monitoring of the contribution of the SMME sector to the economic development of various economies (Berisha & Pula, 2015:18).

According to the UK SME Landscape and Standardisation Research Report (2014:33), the European Union (EU) defines SMMEs as enterprises with fewer than 250 employees and which have an annual turnover of less than €50 million, and/or an annual balance sheet total not exceeding €43 million. The World Bank defines SMMEs as enterprises employing fewer than 300 persons and the values of their turnover and balance sheet are the same, therefore less than $15 million US dollars each. Unlike the European Union and the World Bank, the Organisation for Economic Co-operation and Development (OECD) does not include the criteria of an annual turnover and a balance sheet in their definition of SMMEs. It defines SMMEs as those businesses that employ up to 500 persons (Buculescu, 2013:106).

In the United States, the government department called Small Business Administration (SBA) is mandated to establish the classification of SMMEs. It uses the criteria of the number of employees, annual turnover and the SMME sector to establish the classification. Therefore, in the manufacturing and service industries, an enterprise is classified as an SMME if it employs fewer than 500 persons. In the services industry, the threshold ranges from fewer than 500 to more than 500 employees, with an annual turnover of about $7 million to about $25 million. In the agriculture sector, an enterprise is classified as SMME if it employs fewer than 500 employees, with an annual turnover of about $0.25 million (Robu, 2013:85).

According to the BRICS (Brazil, Russia, India, China, and South Africa) Summit document (2013:1), one of the purposes of this alliance is to improve the economic development in their

regions by promoting SMMEs (Motilewa, Ogbari & Aka, 2015:904; De Kock, 2015:12). However, the definitions of SMMEs in these countries vary as indicated in Table 2.1.

Table 2.1: Definitions of SMMEs by BRICS countries

	BRICS					
	Brazil		**Russia**	**India**	**China**	**RSA**
	Industrial	**Commercial**				
Number of employees and turnover	**Small and medium enterprise**	**Small and medium enterprise**	**Small and medium enterprise**	**Micro, small and medium enterprises**	**Small and medium enterprise**	**Small, medium and micro enterprise**
Number of employees						
Micro	Up to 19	Up to 9	0	0	0	< 20
Small	20 to 99	10 to 49	15 to 100	0	< 300	50 to 99
Medium	100 to 499	50 to 99	101 to 250	0	300 to 2000	100 to 200
Turnover						
Micro	0	0	0	< Rs50 m	0	< R150 000
Small	0	0	400 m RUB max	Rs50–60 m	< Y30	R2 m to R4.5 m
Medium	0	0	1B RUB max	Rs60–99 m	Y30–Y300 m	R4.5m–R50 m

Source: Adopted from NCR (2011:23) and Edinburgh Group (EG) (2013:9)

Table 2.1 indicates that in Brazil, SMEs are grouped into industrial and commercial categories as part of their definition, while in Russia, India, China and South Africa, the grouping is different. In the latter countries, SMEs are defined without taking into consideration whether they fall under industrial or commercial categories. Although the criteria for defining SMMEs consist of capitalisation, number of employees and turnover, BRICS countries mainly recognise the number of employees and turnover when defining SMMEs. Table 2.1 further shows that in South Africa and India, the abbreviation 'SMEs' was extended to 'SMMEs', which means small, medium and micro enterprises.

In the South African context, the definition of SMMEs encompasses a much broader range of businesses than that of SMEs. SMMEs include formally registered and informal businesses. These businesses range from medium-sized enterprises, such as established family businesses with a workforce of over 100 people to informal micro-enterprises. The upper end of the range of SMMEs comprises registered businesses (SEDA, 2016:5). This study focused on registered SMMEs as these businesses were easily traceable.

The South African National Small Business Act 102 of 1996 has been a point of reference when defining SMMEs in South Africa. Owing to radical changes in the economic status of South Africa, this Act was amended in 2003, which resulted in changes in the definition of SMMEs within the South African context. Therefore, the National Small Business Amendment Act 26 of 2003 updated the definition of SMMEs according to five categories established by the original Act. These included the standard industrial sector and subsector classification, size of class, equivalent of paid employees, turnover and asset value – excluding fixed property.

According to the National Small Business Act 102 of 1996 (the original Act), micro enterprises are business entities operated by the owners and their families, and they only employ less than five employees. Their turnover is less than R150 000 per year and they are informally structured. However, the owner needs basic business skills and training potential to make the transition to a viable formal small business. On the other hand, very small enterprises are informal businesses that have access to technology, and they employ less than ten paid employees, except for the mining, electricity, manufacturing, and construction sectors, in which the figure is 20 employees. Small enterprises are formal registered businesses with fixed business premises. These small enterprises have a complex management structure and they employ up to 50 employees. Medium

enterprises are characterised by the decentralised management structure with division of labour. They operate at fixed premises with all formal requirements. The owner manages them and they employ up to 200 employees (NCR, 2011:25).

After the amendment of the National Small Business Act 102 in 2003, a model for the definition of SMMEs in South Africa was also amended. There was an increase in the value of total annual turnover and gross assets excluding fixed property.

According to the South Africa National Small Business Amendment Act No. 102 of 2003, SMMEs are defined as indicated in Table 2.2 below:

Table 2.2: Definition of SMMEs in South Africa

Sector in accordance with the Standard Industrial Classification	Size of class	The total full-time equivalent of paid employees	Total turnover	Total gross asset value (fixed property excluded)
Agriculture	Medium	100	R5 m	R5 m
	Small	50	R3 m	R3 m
	Very small	10	R0.50 m	R0.50 m
	Micro	5	R0.20 m	R0.10 m
Mining and quarrying	Medium	200	R39 m	R23 m
	Small	50	R10 m	R6 m
	Very small	20	R4 m	R2 m
	Micro	5	R0.20 m	R0.10 m
Manufacturing	Medium	200	R51 m	R19 m
	Small	50	R13 m	R5 m
	Very small	20	R5 m	R2 m
	Micro	5	R0.20 m	R0.10 m
Electricity, gas and water	Medium	200	R51 m	R19 m
	Small	50	R13 m	R5 m
	Very small	20	R5.10 m	R1.90 m

	Micro	5	R0.20 m	R0.10 m
Construction	Medium	200	R26 m	R5 m
	Small	50	R6 m	R1 m
	Very small	20	R3 m	R0.50 m
	Micro	5	R0.20 m	R0.10 m
Retail and motor trade and repair services	Medium	200	R39 m	R6 m
	Small	50	R19 m	R3 m
	Very small	20	R4 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m
Wholesaler trade, commercial agents and allied services	Medium	200	R64 m	R10 m
	Small	50	R32 m	R5 m
	Very small	20	R6 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m
Catering, accommodation and other trade	Medium	200	R13 m	R3 m
	Small	50	R6 m	R1 m
	Very small	20	R5.10 m	R1.90 m
	Micro	5	R0.20 m	R0.10 m
Transport, storage and communications	Medium	200	R26 m	R6 m
	Small	50	R13 m	R3m
	Very small	20	R3 m	R0.60 m
	Micro	5	R0.20 m	R0.10 m
Finance and business services	Medium	200	R26 m	R5 m
	Small	50	R13m	R3m
	Very small	20	R3 m	R0.50 m

	Micro	5	R0.20m	R0.10m
Community, Social and Personal Services	Medium	200	R13m	R6m
	Small	50	R6m	R3m
	Very small	20	R1m	R0.60m
	Micro	5	R0.20m	R0.10m

Source: National Small Business Amendment Act 26 of 2003

Therefore, in this study, the definition of SMMEs in South Africa according to the South African National Small Business Amendment Act 26 of 2003 was used.

In order to understand the types of SMMEs that contribute to economic development, this study also determined the types of SMMEs that operate in Rustenburg. There are basically three types of SMMEs as indicated in Table 2.3 below:

Table 2.3: Types of SMME business structures in South Africa

Type of SMMEs	Definitions	Reference
Sole proprietorship	A sole proprietorship is an unincorporated business operated by one person. Generally, the owner is known as a sole trader. Sole proprietorship simply refers to a one person-owned business. The owner is personally responsible for its debts. It does not create a legal entity separate from the owner.	Oxford (2003:475)
Partnership	A partnership is a legal form of business, which has two or more owners who share management responsibilities and profits. The solicitor partnership may have a maximum of 20 partners. There is always a contract to formalise each partner's contribution to the business, his or her responsibilities, profit share and the means of resolving disputes.	MWeb (2005:2)
Private company	A private company has at least one and up to fifty shareholders. These shareholders are normally directors of the business and they are protected from individual liability when the business is bankrupt. These types of businesses are legal entities and are registered with a unique company with a registration number assigned to them.	Engelbrech (2004: 25)

Source: Oxford (2003:475), MWeb (2005:2) and Engelbrech (2004:25)

Having discussed what constitutes SMMEs and its types of business structures, it is also crucial to discuss the concept of economic development as this study aimed at determining the role of SMMEs in economic development. The next section discusses the background of economic development.

2.3 BACKGROUND OF ECONOMIC DEVELOPMENT

According to Pietak (2014:45), SMMEs stimulate economic development. However, there is no conclusive definition of economic development owing to its multi-dimensional characteristics. Sen (1999, as cited by Feldman, Hadjimichael & Lanahan, 2015:3) defines economic development as the increase of capacities that contribute to the enhancement of society through the realisation of the potential of individuals, firms and communities. Feldman *et al*. (2015:7) assert that economic development strengthens independent freedom, which provides individuals with the ability to participate fully in economic life. Therefore, economic development includes providing opportunity for individuals to develop the capacities that enable them to engage actively and contribute to the economy. Alemayehu and Mancuso (2015:1) add that the main goal of economic development is to improve the economic well-being of society. Therefore, economic development plays a critical role in determining the level of the standard of living of citizens.

Feldman's (2014:18) definition of economic development is supported by Joseph Schumpeter's (1934) theory of economic development. It is conceptualised that economic development positions the economy on a high growth path and is achieved through innovation and entrepreneurship. Ucak (2015:664) argues that economic development is not only influenced by innovation and entrepreneurship; it can also be influenced by socio-economic and political structures. For instance, countries with political instabilities are characterised by poor living standards of their citizens, high unemployment and poverty as well as low development of SMMEs; hence, there is a lack of economic development in those countries. Todaro and Smith (2015:118) posit that, although economic progress is the integral element of economic development, economic development is not purely an economic concept, as it encompasses more than the material and financial aspects of individuals' lives. The economic development process includes restructuring and re-orientation of the whole socio-economic system of a country. This may include enhancement of individual earnings and production of the country through radical changes in

institutional, social and administrative structures. Furthermore, the economic development of a country can also be enhanced by taking into consideration the attitudes, customs and beliefs of the people in that specific country.

Mohr (2014:521) as well as Todaro and Smith (2015:22) identified the following characteristics of countries with improved economic development:

- better government services that enhance life expectancy and provide education for its citizens;
- availability of more decent and quality job opportunities;
- improvement in the distribution of income;
- reduction of inequality and absolute poverty; and
- an opportunity for citizens to participate freely in decision-making and to be free from servitude.

In addition to these characteristics, Feldman *et al.* (2015:4) assert that human development is an integral component of economic development because it focuses on the conditions and needs of the deprived majority by satisfying their basic human needs and acknowledging the significance of the self-esteem and freedom of choice of citizens. Furthermore, Sharipov (2015:759) underscores that human development as an integral part of economic development is the ability of individuals to have improved living standards. Countries that are able to fight poverty and unemployment and to find solutions to other social problems by promoting SMMEs have a better and more improved human development than those countries that overlook SMMEs, poverty, unemployment and social problems. Therefore, economic development brings benefits, such as changes in structure, institutions and individual attitudes (Mohr, 2014:521; Pietak, 2014:45).

Looking at various viewpoints in respect of economic development, it is conceptualised that economic development is the process that improves the quality of human life. This process involves the raising of people's standards of living in terms of per capita income, as well as the level of consumption, and providing access to services such as education and health care. It also involves the establishment of conditions that are conducive to the growth of people's self-esteem, as well as the enhancement of people's freedom in terms of giving them diverse goods and services. Most importantly, economic development involves the achievement of innovation and entrepreneurship through the establishment of SMMEs (Feldman, 2014:18; Sienkiewicz,

2014:413). Therefore, this study assumed that SMMEs play a role in economic development; hence, that it can improve the living standards of people.

Although economic development is a multivariate concept, its measurement is of paramount importance as it provides information regarding the living standards of people (Feldman et al., 2015:6). In addition, Mohr (2014:79), Maloka (2013:1) and Mostert (2002:317) assert that economic development can be measured, among other, by unemployment and poverty indicators. These two measures have a greater influence on economic development than other measures such as GDP, provision for education to the citizens, free participation of citizens in decision-making, improved life expectancy, and freedom from servitude. Therefore, this study focused on unemployment and poverty measures when determining the role of SMMEs in economic development.

In order to understand the importance of economic development and the role SMMEs play in economic development, it is essential to analyse the role of SMMEs from economic development theoretical perspectives. Therefore, the next section will discuss the theoretical perspectives of the role of SMMEs in economic development.

2.4 THE ROLE OF SMMES FROM ECONOMIC DEVELOPMENT THEORETICAL PERSPECTIVES

Owing to the multivariate nature of economic development, scholars such as Joseph Schumpeter (1934), Adam Smith (1976) and Karl Marx (1933) all cited by Dang and Pheng (2015) developed theories of economic development. These theories are the models for the achievement of the objectives of economic development such as to create employment and reduce poverty (Dang & Pheng, 2015:11). Todaro and Smith (2015:152) aver that economic development theories help individuals and institutions to think systematically about how to organise their efforts in order to achieve economic development, which is an integral part if the well-being of citizens. These theories recognise the role that SMMEs play in economic development.

Joseph Schumpeter (1883–1950) is known as the first economist who developed the theory of economic development (Sharipov, 2015:763). According to Schumpeter's theory, entrepreneurial innovation is the engine for economic development, such that through entrepreneurial innovation of SMMEs, new resources are discovered and supplied to the economy, and hence, promoting economic development. Businesspersons, entrepreneurs, innovators and creative persons are the

driving force behind the development of the economy (Tuluce & Yurtkur, 2015:723). These categories of people are characterised as the initiators and risk-takers as they discover new markets for their products, and risk their physical and financial resources to create new products and enter new markets. They also combine the factors of production in an optimal manner and utilise innovative technology in their businesses. Schumpeter (1934, as cited by Sharipov, 2015:763) further affirms that economic development can be improved through the introduction of new products and new methods, discovering new markets for the products, ensure availability of resources, as well as embarking on industrialisation of organisations.

According to Pietak (2014:49), Schumpeter's theory does not consider capital invested in the economy as the driving force of economic development. It only focuses on entrepreneurship and innovation through the establishment of SMMEs as the "hero of development" that can boost an economy of the country. Therefore, schumpeter regarded innovative and creative entrepreneurship of SMMEs as the only instrument for economic development. Schumpeter's theory on economic development is based on a competitive market, the efficiency of the financial markets and the invention of new technology by SMMEs, which could promote efficient production processes in the economy. However, most developing countries and countries that have no democratic systems face difficulties to fulfil these conditions. Therefore, Schumpeter's theory is mostly effective in developed countries owing to their improved economies (Pietak, 2014:49; Tuluce & Yurtkur, 2015:723).

Dang and Pheng (2015:18) contend that the international dependence theory influences economic development. According to this theory, there is low economic development in developing countries because of the dominance by developed countries. There are multinational corporations of which developed countries are more beneficiaries than developing countries. Although there are trade relationships between developed countries and their counterparts, in most instances, developing countries are parasites in terms of market and capital investment. There is unequal exchange of trade so that the developed countries can extract the resources of developing countries at a cheap price. As a result, developing countries become the obvious victims of the exchange trade. The distribution processes of the products between developed and developing countries are mainly controlled by the developed countries even in situations where the developing countries have full ownership of the products in question. Therefore, low economic development is prominent in developing countries.

Due to the afore-mentioned factors that contribute to the low economic development in the developing countries, Dang and Pheng (2015:18) contend that the economic development of developing countries could be improved if the developing countries could break up their trade relationships with the developed world. In many instances, these relationships were found to be worthless as they were characterised by the dependence of developing countries on their counterparts, the developed countries. According to Todaro and Smith (2015:137), the dependency theory has two major weaknesses. Firstly, this theory does not provide any direction on how the developing countries can initiate and sustain their economic development. Secondly, most developing countries have insufficient economic experience so that they have difficulties in embarking on nationalising their industrial processes.

Most developing countries adopted the dependence theory in the first place. Hence, many developing countries terminated their trade relationships with developed countries. However, it was realised that the economic downturn of developing countries worsened due to a lack of trade relationships with the developed world, so that the trade relationships between the developed and developing worlds were reinstated. This then resulted in the improvement of economic development of Asian countries such as Hong Kong, Singapore, Thailand and South Korea. Therefore, the economic development of an open economy is more likely to improve than that of the closed economy as a result of the free movement of goods and services supplied by SMMEs. Governments should implement fiscal policies that promote an open economy. SMMEs should be able to trade goods and services with other individuals in the international community and there should be a free flow of funds and investments across borders (Dang & Pheng, 2015:18).

Another theory of economic development is Solow's neoclassical growth theory by Robert Solow, which was developed in 1956. In this theory, it is assumed that economic development can be improved if there is equality between the demand and supply of SMMEs' products and services in the economy. Moreover, there should be coordination between three sources of economic development, namely SMMEs' investment, employment and technology. The theory suggests that savings by SMMEs play a role in influencing the level of production in the economy. Therefore, a higher SMME savings rate in the economy yields higher levels of production in that particular economy, which results in improved economic development. Another factor that determines economic development in this theory is population growth. Higher population growth can only contribute to economic development if there is a substantial increase in investments by SMMEs in

the country (Todaro & Smith, 2015:138). If the population growth rate is higher than the rate of growth in SMME investment in the country, this may cause a decrease in income, which may result in low economic development. The theory further identifies technical progress of SMMEs as one of the factors that influence economic development. The term 'technical progress' simply means that there should be a qualitative transformation in the production processes of SMMEs by training the workforce, improving the structure of the organisation as well as increasing the production levels of SMMEs through the use of innovative technologies. Technological progress of SMMEs has been found by this theory to be the most influential factor of economic development (Sharipov, 2015:768).

Todaro and Smith (2015:152) identify three basic classifications of technological progress of SMMEs:

- **Neutral technological progress –** this occurs when the production levels are achieved by using the same quantity and combinations of production factors, such as land, labour, natural resources and entrepreneurship through SMMEs. For example, innovations by SMMEs, such as division of labour, contribute to the increase of production levels as well as consumption levels of the products by individuals. The neutral technological progress is illustrated in Figure 2.1.

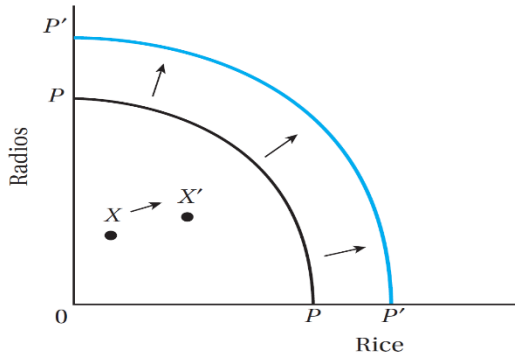

Figure 2.1: Effect of increase in physical and human resources on the production frontier

Source: Todaro and Smith (2015:151)

As indicated Figure 2.1, innovations by SMMEs embodied in physical and human resources contribute to higher levels of production of radios and rice as indicated by the shift of point X to X', and the shift of point P to P'. Therefore, the improvement of the quality of the existing resources that SMMEs use through innovative technology could result in the improvement of the economic development of a country.

- **Capital-saving technological progress** – this technological progress of SMMEs occurs when some inventions or innovations in SMMEs contribute to increased levels of production in the country using the same quantity of inputs of capital. The capital-saving technological progress is illustrated in Figure 2.2.

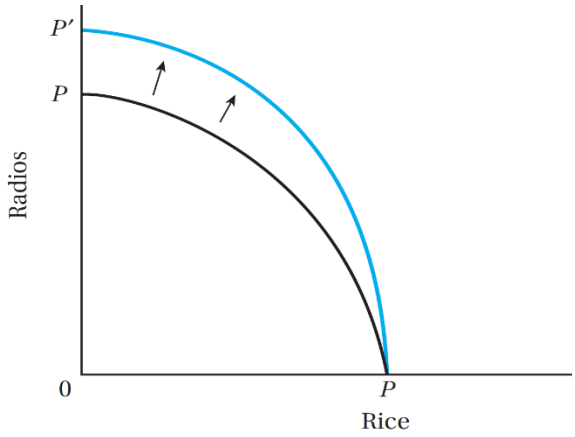

Figure 2.2: **Effects of technological change in the industrial sector on the production possibility frontier**

Source: Todaro and Smith (2015:151)

As indicated in Figure 2.2, the technology of radio production has caused the increase in production levels of radios. This is illustrated by the shift from point P to P'. This technology might contribute to the invention of radio transistors, which as a result, increases the growth of radio production. Therefore, SMMEs that optimally utilise technology in their production processes contribute more to economic development of a specific country than those SMMEs not utilising technology.

- **Labour or capital augmenting technological progress**

This is the combination of labour and capital technological progresses that SMMEs utilise. Labour-augmenting technological progress occurs when technology influences the

improvement in the quality of the skills of labour that SMMEs use. Capital-augmented technological progress occurs when there is productive use of existing capital goods by SMMEs owing to their innovative and inventive ability. Therefore, SMMEs that combine labour and capital-augmenting technological progress contribute more to economic development than those SMMEs that use one technological progress.

Based on the technological progress of SMMEs as a means for economic development, Todaro and Smith (2015:154) opine that innovation and invention by SMMEs play a significant role in improving the quality of the existing physical and human resources, which consequently raises the production frontiers of the economy. Therefore, innovation and invention by SMMEs remain the major global instruments for sustainable economic development.

From the theories of economic development that have been discussed, Schumpeter's (1911) theory recognises entrepreneurship through SMMEs as the engine of economic development. This theory further indicates that it is only through SMMEs that innovation and technology are generated; hence, improving the economic development. Therefore, in its effort to determine the role of SMMEs in economic development, this study made use of Schumpeter's theory.

2.4.1 Measurement of economic development

Economic development is a multidimensional concept that focuses on qualitative measures, such as, among others, the improvement of the quality of life, mitigation of risk, innovation, and entrepreneurship through SMMEs (Feldman *et al.,* 2015:3). Although economic development is a complex concept, it generally involves the well-being and the progress of citizens. Progress is the positive adjustment in the well-being of households. Therefore, measuring economic development is based on three conceptual pillars, namely material conditions, quality of life and sustainability (Organisation for Economic Cooperation and Development [OECD], 2013:1). Therefore, this study sought to determine how SMMEs contribute towards these factors in the context of Rustenburg.

Figure 2.3 below indicates the framework for measuring well-being and progress.

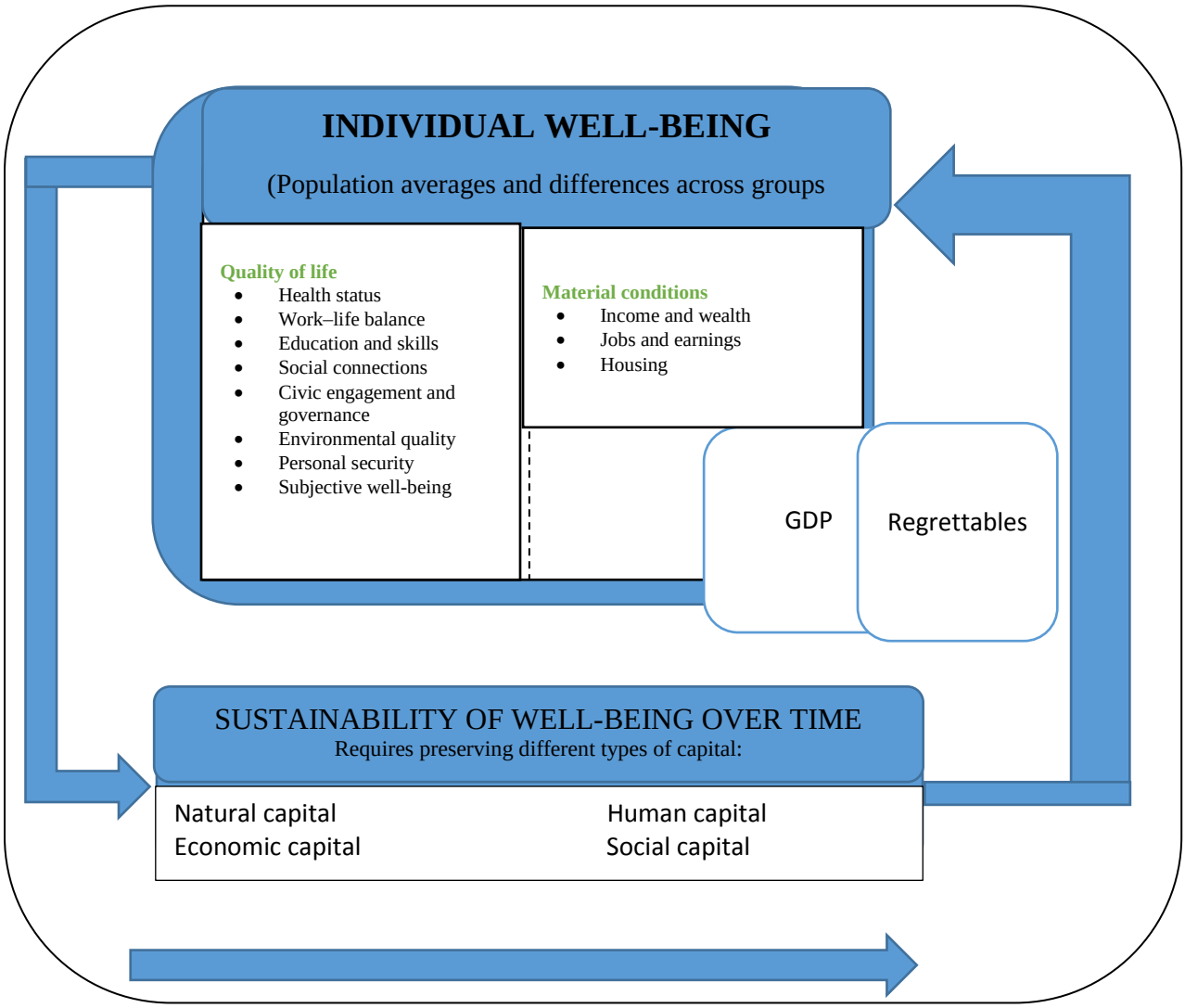

Figure 2.3: OECD framework for measuring well-being and progress

Source: Adapted from OECD (2013:4)

- **Quality of life**

Although economic resources are acknowledged for the progress of the well-being of citizens, social services such as health status, human contact, education, jobs and environmental quality are fundamentally important for the quality of life (OECD, 2013:6). Measuring the quality of life can be done using objective and subjective measures. Objective approaches measure areas such as

quality of life and the environment using indicators such as GDP and gross national income (GNI) (Turkoglu, 2015:11). GNI measures income of all permanent residents of the country, whereas GDP measures what occurs within the boundaries of the country. Thus, production from both permanent residents and foreigners form part of the country's GDP (Mohr 2014:63).

Objective ways of measuring quality of life are the evaluative, experience and eudemonic approaches. The **evaluative** approach involves individuals conducting self-evaluation of their satisfaction with a particular element, such as job or health satisfaction. The **experience** approach involves individuals conducting self-evaluation on the emotional aspects of their lives, such as happiness, sadness and energy levels. In the **eudemonic** approach, an individual has to conduct an assessment of his or her feelings, such as self-efficacy, achievement and good relationships (Coram Voice, 2015:5).

Figure 2.4 indicates the dimensions of objective well-being:

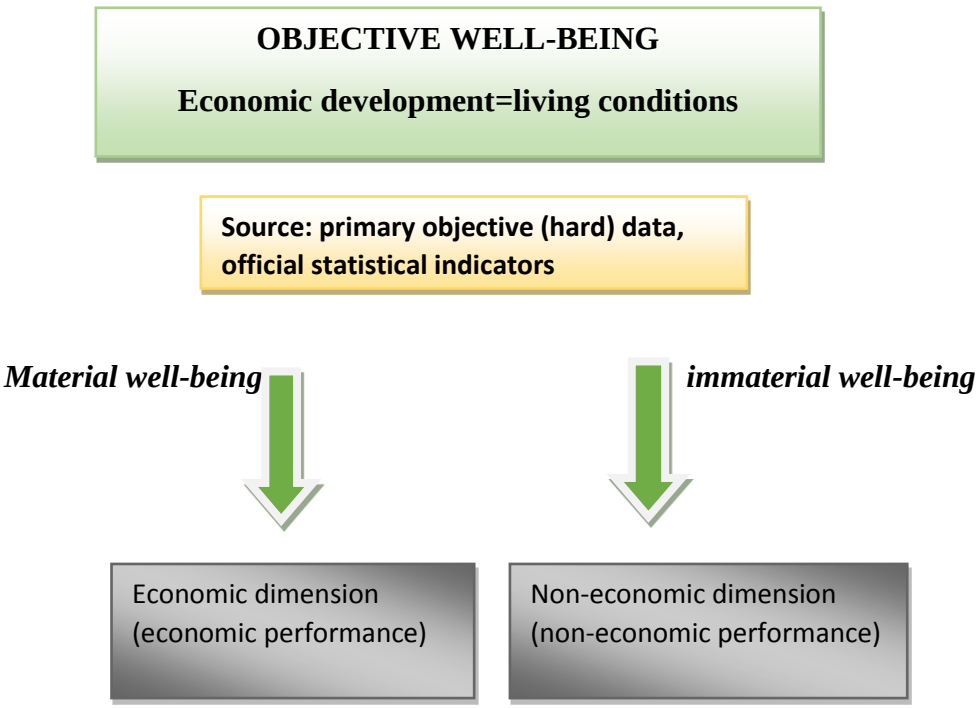

Figure 2.4: Dimensions of objective well-being

Source: Ivkovic et al. (2014:10)

Objective well-being can only be depicted from hard data measured by statistical indicators that obtained from official databases, such as GDP, inflation rate, unemployment rate and balance of payment. Owing to inadequacy of economic measures of well-being, non-economic measures have been used, and are acknowledged to have been more accurate than the economic measures (Ivkovic, Ham & Mijoc, 2014:9).

The subjective approach involves asking people to assess their own quality of life (Turkoglu, 2015:11). The subjective approach is more widely recognised as it measures quality of life more accurately than the objective approach. It is argued that the only way of knowing whether one is satisfied or not, is to ask him or her. The subjective approach of measuring the quality of life has the advantage of less protective and self-reporting such that the information provided is more accurate than the information provided in an objective approach (Wozniak & Adamczyk, 2014:3).

According to the OECD (2013:8), the subjective approach provides essential information about people's lives, it indicates the link between impartial conditions in which people live and the way they understand and assess those conditions. In the same vein, Alatartseva and Barysheva (2015:39) argue that the subjective approach is the basis on which the objective approach is built, and it is believed that the subjective approach plays a more significant role in assessing the quality of life for the forthcoming generations. McGregor, Coulthard and Camfield (2015:6) assert that the subjective approach has been found to be a better instrument to measure how people experience the economic development of their society. This approach controls their actions such that policymakers when formulating economic policies account for it. It further creates the platform for dialogue between citizens and government.

Owing to its advantages of protective and self-reporting as well as the accuracy of the information provided, the subjective approach was used in this study to determine whether SMMEs contribute to economic development by improving the quality of life of people living in Rustenburg.

- **Material conditions**

According to Ivkovic *et al*. (2014:10), measuring the material conditions of citizens focuses on the income, resources and level of consumption as well as how these resources are disseminated among citizens. It also focuses on measuring the income of each household in the economy rather than measuring the economy as a whole through, for instance, GDP per capita. Hence, material

conditions can be measured by a range of initiatives, such as measurement of disparities in the national accounts.

Measuring the disparities in national accounts utilises the System of National Accounts (SNA). This system provides data on the income, level of consumption and resources of each household using a series of household accounts. The weakness of this measurement is that only the information on the total number of households and the average conditions thereof is provided. These average conditions do not reflect the real economic status of an individual if there are inequalities in the population. In addition, the measures of household consumption and production using SNA disregard household services such as childcare, cooking and cleaning, which are essential activities that households perform in order to improve their well-being. Having an SNA disregards some of the essential services performed by households. The OECD is embarking on estimating the monetary value of these services and integrating the value ascertained with the value determined by the SNA (OECD, 2013:6).

- **Sustainability**

Sustainability involves meeting personal needs without compromising the future well-being of the future generations (Shields, 2015:61). Through social sustainability, individuals are able to participate in decision-making and interacting with other people. The sustainability indicators, such as the genuine progress indicator (GPI), are also instruments for measuring the well-being of people. This indicator is used to determine the socio-economic status of people in a particular country or region. It assesses the quality of life in addition to the economic status of people by including social and environmental factors, which are ignored by the GDP (Ivkovic *et al*., 2014:15).

According to the OECD (2013:11), measuring sustainability focuses on natural, human and social capital. Measuring natural capital involves developing indicators that can monitor the natural resources of the economy, such as land and subsoil assets. In addition, measuring natural capital involves assigning monetary values to those natural resources. Human capital measurement involves ascertaining the changes in the levels of competencies, knowledge and skills embodied in the people. Therefore, social capital can be measured by determining the personal relationships in the structures of the organisation, social network support, civil engagement as well as social norms and shared values that improve the mutual beneficial cooperation.

According to the Global Reporting Initiative (GRI) (2015:7), SMMEs have comparatively fewer environmental and social impacts than large firms. They play a crucial role in building a sustainable future through responsible business practices. Responsible business practices entail the combination of continuous improvement, sustainability thinking and sustainable reporting that SMMEs reinforce as they operate in an environment. In addition, Choongo, Burg, Paas and Masurel (2016:4) assert that SMMEs are more flexible in integrating sustainability into their operational and strategic objectives than large firms.

2.4.2 Instruments for measuring economic development

Several instruments are used to measure economic development, and their suitability differs from one context to another. The following are the most popular instruments for measuring economic development:

- **Human Development Index (HDI)** – this is a composite index consisting of three social indicators, namely life expectancy, adult literacy and years of schooling (education), and one economic indicator, GDP per capita. Life expectancy at birth indicates the ability to live a long and healthy life. Years of schooling reflect the ability to acquire knowledge. GDP per capita indicates the ability to achieve a decent standard of living. However, the HDI excludes other indicators such as human development in the form of infant mortality and nutrition (United Nations Development Programme [UNDP], 2016:3).
- **Human Poverty Index** – this index measures how people in different countries are deprived by recording factors of deprivation, such as life expectancy, low literacy rates and overall living conditions (Economic and Commercial Cooperation of the Organisation of Islamic Cooperation [COMCEC], 2016:5).
- **Physical Quality of Life Index (PQLI)** – this is used for measuring the improvement in the quality of life by applying factors such as increase in life expectancy, a drop in the infant mortality rate and an increase in basic literacy. However, the PQLI has a weakness in that it does not cover the critical elements of development and it does not measure welfare in its entirety (Balasescu & Dovleac, 2016:260).
- **Social Accounting Matrices (SAM)** – this instrument consists of social accounts that provide national accounting framework for social indicators. The SAM is used to analyse

the influence of government policies on various social goals, and it identifies the most effective policies that can be used to achieve specific social goals (Kumar & Sharma, 2014:6).

For the purpose of this study, some critical elements of measuring instruments, such as basic literacy, employment and poverty indicators, were used.

2.4.3 The benefits of economic development

Economic development brings various benefits to the country which can be ascribed to the contribution by SMMEs. These developments produce products resulting from skills acquired by workers. Therefore, these skills are the result of an increase in the employment rate (Scutaru, 2013:35). Economic development is regarded as the instrument for lowering poverty in both developed and developing countries by providing job opportunities. SMMEs are the engines through which economic development improves the living standards of the citizens (Alemayehu & Mancuso, 2015:1).

Economic development creates a positive assurance relevant to operating a business owing to its effect on economic prosperity, improved quality of life, better infrastructure, increased education, and opportunities for more fruitful exchange (Feldman *et al.,* 2015:14). Economic development further improves tax revenue from SMMEs in such a way that it offers the government the extra money it requires for financing public projects in developing the country (Feldman et al., 2015:17; Ntiamoah, Li & Kwamega, 2016:560).

Todaro and Smith (2015:22) identified three core values of economic development as indicated in Table 2.4:

Table 2.4: Core values of economic development

Core value	Explanations
Sustenance: the ability to meet basic needs	All people have certain basic needs without which life would be impossible. These life-sustaining basic human needs are food, shelter, health and protection. When any of these is absent or is in critically short supply, a condition of absolute underdevelopment exists.
Self-esteem: to be a person	Self-esteem is a sense of worth and self-respect, of not being used as a tool by others for their own ends. All societies seek some basic form of self-esteem, although they may call it authenticity, identity, dignity, respect, honour or recognition.

	Owing to the significance attached to material values in developed nations, worthiness and esteem are nowadays increasingly conferred only on countries that possess economic wealth and technological power – those that have developed.
Freedom from servitude: to be able to choose	Freedom is to be understood in the sense of emancipation from alienating material conditions of life and from social servitude to nature, misery, oppressive institutions, and dogmatic beliefs, especially that poverty is predestination. Freedom involves an expanded range of choices for societies and their members together with a minimisation of external constraints in the pursuit of some social economic goals. The concept of human freedom also encompasses various components of political freedom, such as personal security, the rule of law, freedom of expression, political participation, and equality of opportunity.

Source: Adapted from Todaro and Smith (2015:22)

Although Todaro and Smith (2015:22) identify three core values of economic development, it seems that sustenance has a significant influence on economic development such that its absence creates a condition of 'absolute underdevelopment'. Hence, this study focused on sustenance as a core value of economic development when determining the role of SMMEs in the economic development of Rustenburg owing to its greater influence on economic development.

According to the literature reviewed, it was evident that various factors influence economic development, such as a high unemployment rate, increased levels of poverty, a lack of education, degradation of the environment, and political instability. However, unemployment and poverty have been identified, through the subjective approach, as the major factors that influence economic development. Hence, countries with high levels of unemployment and poverty have a very low economic development (Nkwinika & Munzhedzi, 2016:78). Therefore, many countries focus on utilising unemployment and poverty as the measures of economic development (Rao, 2015:7).

The next section reflects the nature and measures of unemployment:

2.5 THE NATURE OF UNEMPLOYMENT

According to SEDA (2016:6) and Ramukumba (2014:19), about 60% of employment in the private sector is created by SMMEs. Most of the people who are likely to be unemployed and marginalised are employed in SMMEs owing to the efficiency and effectiveness of these. In South Africa, ways of addressing the issue of high youth unemployment are being debated and SMMEs are known to be the solution as they employ more young job-seekers compared to large firms. SMMEs also

employ more staff than their counterparts, that is, the large firms. In addition, job-seekers without matric certificates are more likely to be employed by SMMEs than those holding higher qualifications (Business Environment Specialists Report, 2013:5). Figure 2.5 indicates the share of men employed by SMMEs by occupation and population group in South Africa in the third quarter of 2015 and the third quarter of 2016.

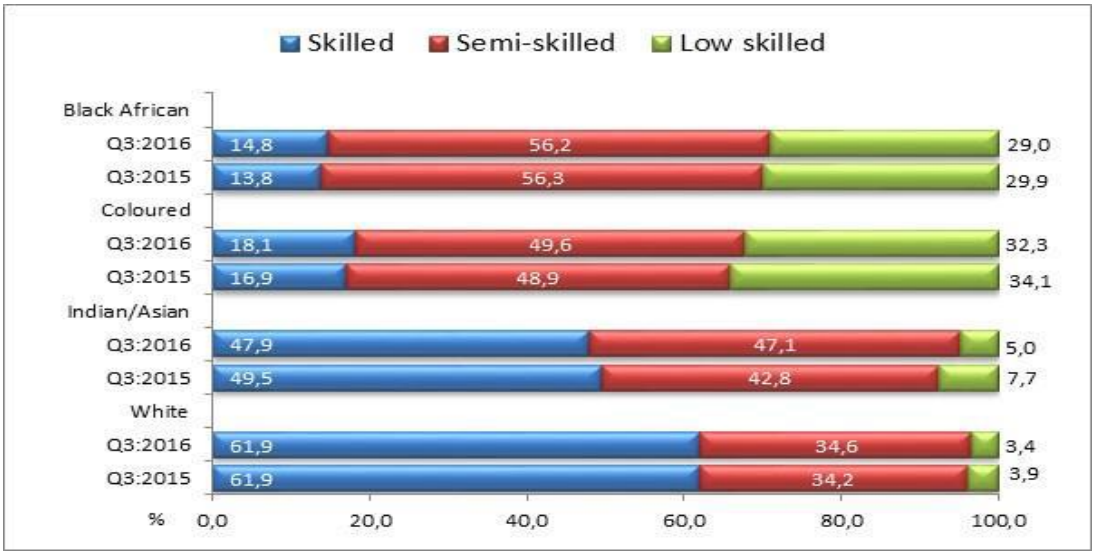

Figure 2.5: Share of men employed by SMMEs in South Africa by occupation and population group, Q3:2015 and Q3:2016.

Source: Stats SA (2016:5)

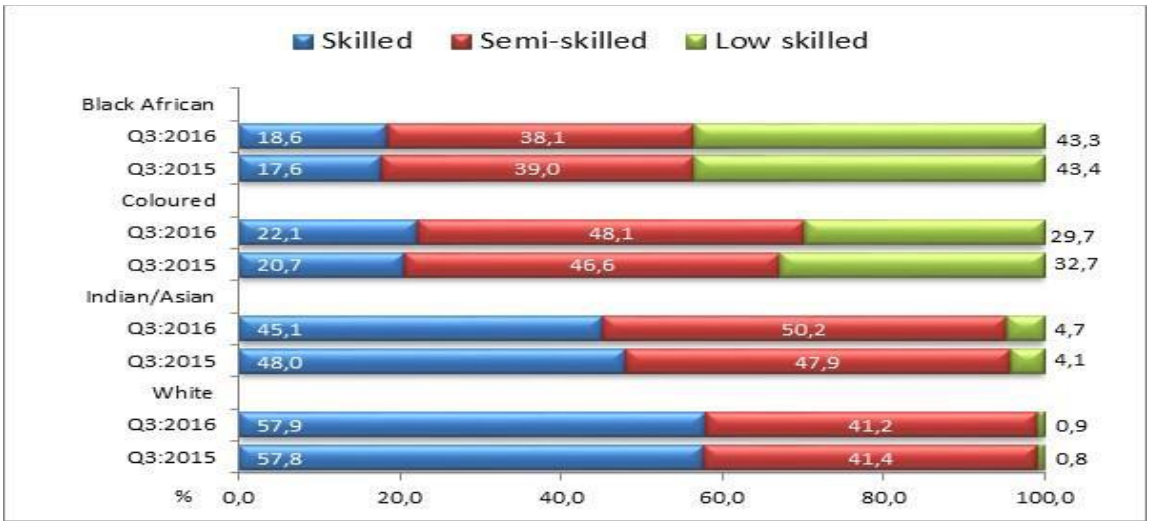

Figure 2.6: **Share of women employed by SMMEs in South Africa by occupation and population group**, **Q3:2015 and Q3:2016.**

Source; Stats SA (2016:5)

As indicated in Figures 2.5 and 2.6, most of the white and Indian groups (both men and women) in skilled occupations dominated the employment arena. The majority of black Africans and coloured people were employed in semi-skilled and low-skilled occupations. Most of these jobs were created by SMMEs (Stats SA, 2016:5).

The types of employment that SMMEs create provide for full-time (permanent), part-time and causal workers. According to Mathekga (2009:4), a person in permanent employment works directly for the employer and is paid directly by the employer for an indefinite period of time. Part-time employment means that a person is permanently employed, but works fewer days a week or fewer hours a day. Buhlungu and Webster (2005:253) describe a casual employee as a worker employed for a short period and who works for parts of the week, for example a domestic worker who only comes once a week for five hours a day.

Although the trends indicate an improvement in employment generation by SMMEs, there are still many people without employment in South Africa. In South Africa, the unemployment rate was at 25.5% in 2015 and rose up to 27.1% in 2016 (Stats SA, 2016:8). Hence, people go to school and attend various trainings with the aim of getting employment. Owing to economic instability, some of these people find themselves being jobless. The problem of unemployment is not only an economic problem; it is also a social problem in the sense that unemployed people become

dependent on society for survival. These social problems refer to the increased levels of poverty, violence and inequality; hence, it becomes a problem for the whole society. Unemployment can also make it impossible for individuals to pay back their personal loans, which had been granted to them before they became unemployed. This then causes the unemployed to be denied access to further loans (Mohr, 2014: 21).

Malakwane (2012:9) adds that unemployment has cost implications, namely economic and non-economic costs. Economic costs include the decline in the levels of a country's GDP, an increase in government expenditure owing to government's transfer of payment such as the Unemployment Insurance Funds (UIF) and a decline in the productivity due to employees who become unproductive.

Although there is consensus that SMMEs contribute to economic development by reducing unemployment, there is no conclusive agreement about what constitutes unemployment (Mncayi 2016:11). Unemployment is conceptualised in different ways in different countries. Unemployment takes place when a person who is actively looking for employment is unable to find work. This is often used as a yardstick to measure the health of the economy. Therefore, the definition of unemployment only caters for those individuals who are searching for work. Those people who are not searching for work are ignored when defining unemployment (Posel *et al*., 2014:28). The definition of unemployment is based on three criteria, namely 'without work', 'presently available for work' and 'looking for work'. Being 'without work' means that an individual is not in any form of employment where he or she can be remunerated. The criterion of 'presently available for work' means that an individual must avail him- or herself for a job during the reference duration. If the individual is 'looking for work,' it means he or she must take an active step to look for employment, for example, through applying for advertised jobs. These criteria have been accepted globally and they are used as guidelines for defining unemployment in different countries (Lloyd & Leibbrandt, 2013:87).

The fact that individuals who are not looking for employment are not included in the definition of unemployment has been debated and the argument is based on various factors. For instance, some individuals want employment but do not commit themselves to the employment-searching process because they are discouraged by the current high unemployment rate. Consequently, having no income due to a lack of employment makes an unemployed individual not able to afford the cost

of searching for employment. In most instances, unemployment is involuntary as most people do not want to be unemployed and result living in poverty. In addition, owing to a lack of money, in some instances, the unemployed individuals are deprived of searching tools such as access to the internet and networking (Fourie, 2012:8).

Mncayi (2016:12) argues that unemployment is easy to define. However, there is no consensus with regard to the criteria of distinguishing those who are employed from those who are unemployed. In some countries, for example, learners are regarded as part of a workforce and are categorised as unemployed individuals. In other countries, they are not regarded as part of the workforce and they are excluded from the calculation of unemployment rates. In some instances, it is also difficult to categorise those individuals who are under-employed as these people just work for the sake of securing the job. Sometimes their jobs are not in line with their skills and abilities (Ajayi, 2014:64). Therefore, the justifications for excluding non-searching unemployed individuals in the definition of unemployment should be assessed carefully (Fourie, 2012:8).

2.5.1 Types of unemployment

Based on the acknowledgement that SMMEs play a critical role in reducing unemployment, it is important to understand the types of unemployment because unemployment serves as a measurement for economic development (Rao, 2015:7). Unemployment is divided into three types, as described below.

- **Frictional unemployment**

This type of unemployment occurs when an individual takes time to find a job or to move from one job to another. Although there may be vacancies in the country, some individuals who are looking for employment do not get employment immediately. Others who are at work decide to be unemployed for a short time and then find a better job. This type of unemployment is unavoidable, more especially in countries where people are free to move from one job to another, and it is not regarded as a serious problem. In order to reduce frictional unemployment, labour market information and placement services have to be improved as this will improve chances of job-seekers finding jobs (Mohr, 2014: 401).

- **Cyclical unemployment**

This entails short-term unemployment that occurs because of economic downturns (in full recessions) within the business cycle. When the economic output declines as measured by the GDP, the business cycle becomes low, which results in an increase in cyclical unemployment. Therefore, when there is a recession in the country, sales drop and some individuals lose their jobs owing to insufficient demand for the goods and products produced in the country. However, if there is upward movement along the business cycle, economic activity increases, which subsequently results in a decrease in unemployment (Mncayi, 2016:17).

- **Structural unemployment**

Unemployment is said to be structural when the skills of the unemployed individuals do not match the jobs available or when there is no job due to structural changes in the economy. Sometimes, changes in production methods such as replacing people with machines to do some work can cause a decline in the demand for individuals with specific education or skills, which results in an increase of unemployment rate. Thus, modern technological practices that are more efficient than qualified individuals are introduced. Structural unemployment is also said to be involuntary as it takes place because of structural changes in the economy (Malakwane, 2012:11; Mncayi, 2016:18).

Structural unemployment can also be caused by foreign competition. For example, the growth of textile industries in Asian countries has destroyed many jobs in the South African textile industry. Therefore, the increase in trade liberalisation and globalisation has resulted in many South Africans being unemployed. In addition, structural unemployment can also be caused by structural decline in certain industries and discrimination. For example, the closure of mines in South Africa owing to a decline in production has caused many individuals to lose their jobs. Discrimination is also known to have caused unemployment in South Africa, especially during the apartheid era when specific jobs were reserved for the white minority groups. Qualified individuals from other population groups were not given opportunities to secure those jobs. As a result, unemployment was high in the country (Mohr, 2014:500).

2.5.2 Unemployment from global and national perspectives

According to Mncayi (2016:25), developed and developing countries are affected by unemployment. In 2013, more than 202 million people were unemployed globally and this number is expected to increase by more than 215 million in 2018. It is also estimated that during this period, about 40 million new jobs would be created. However, 42.6 million people that are expected to enter the labour market every year will offset this. Therefore, this clearly indicates that not enough is being done to create jobs that could cater for the global population.

The International Labour Organisation (ILO) (2014:11) indicates that the development of labour markets differs from one country to another. For instance, in developed countries such as European Union (EU) countries, 8.6% of the labour force is unemployed. In recent years, unemployment rates have declined in the United States and the United Kingdom. However, unemployment increased further in Italy and France. Unlike Italy and France, the unemployment rate has decreased recently in Canada, Japan and Germany because of the influence of SMMEs. Across different parts of the world, North Africa and the Middle East are said to have the highest unemployment rates of all countries in the world. In 2013, the unemployment rates for North Africa and the Middle East were at 12.2% and 10.9% respectively because of lack of adequate support of SMMEs (ILO, 2014:11).

Table 2.5 indicates that unemployment rates are higher in developing countries, such as sub-Saharan Africa, than their counterparts in the developed countries such as the United States and the United Kingdom. This is caused by inadequate support for SMMEs in sub-Saharan Africa. Therefore, countries with improved economies in which SMMEs are well developed are recognised as having the lowest unemployment rates (Ayandibu & Houghton, 2017:135).

Table 2.5: Global, regional and country-specific estimates and projections of the total unemployment rate, 2007–2016 (percentage points)

Country/region	2007	2012	2013	2014	2015	2016
World	5.5	6.0	6.0	6.1	6.1	6.1
G20 economies	5.1	5.7	5.8	5.8	5.8	5.8
G20 advanced economies	5.7	8.4	8.4	8.4	8.3	8.1
G20 emerging economies	4.9	4.9	5.0	5.1	5.1	5.1

Developed economies and the European Union	5.8	8.6	8.6	8.6	8.4	8.2
Australia	4.4	5.2	5.6	5.7	5.7	5.8
Canada	6.0	7.2	7.1	7.0	7.0	6.9
Japan	3.9	4.3	4.1	4.0	4.0	4.0
United States	4.7	8.2	7.5	7.2	6.8	6.4
European Union	7.2	10.5	11.0	11.1	11.1	10.9
France	8.0	9.9	10.5	10.9	10.8	10.7
Germany	8.6	5.4	5.3	5.3	5.4	5.4
Italy	6.1	10.7	12.2	12.6	12.7	12.7
United Kingdom	5.4	8.0	7.5	7.3	7.2	7.1
Central and South-Eastern Europe (non-EU) and CIS	8.2	8.0	8.2	8.3	8.2	8.2
Russian Federation	6.0	5.5	5.8	5.8	5.8	5.8
Turkey	10.3	9.2	9.9	10.0	9.7	9.6
Middle East	10.2	10.9	10.9	11.0	10.9	10.8
North Africa	11.1	12.1	12.2	12.2	12.1	12.1
Sub-Saharan Africa	7.5	7.6	7.6	7.6	7.5	7.5
South Africa	22.3	25.0	25.3	25.2	25.1	25.1
Country/region	**2007**	**2012**	**2013**	**2014**	**2015**	**2016**
Latin America and the Caribbean	6.9	6.6	6.5	6.5	6.5	6.5
Argentina	8.5	7.2	7.3	7.4	7.4	7.3
Brazil	8.1	6.9	6.7	6.6	6.5	6.5
Mexico	3.4	4.9	5.0	4.9	4.8	4.7
East Asia	3.8	4.4	4.5	4.7	4.8	4.9
Republic of Korea	3.2	3.2	3.2	3.3	3.3	3.4
South-East Asia and the Pacific	5.5	4.1	4.2	4.3	4.3	4.3
Indonesia	9.1	6.1	6.0	6.0	6.0	6.0
South Asia	4.1	3.9	4.0	4.0	4.1	4.1

Source: ILO (2014:19)

Research has revealed that the unemployment rates exceeding 15% are mostly found in developing countries (Page & Shimeles, 2015:18). In most developing countries, such as South Africa, self-employment and informal employment in the SMME sector attract the overwhelming majority of

the labour force in both rural and urban areas (Abdullahi et al., 2015: 525; Page & Shimeles, 2015:18).

2.5.3 Measures of unemployment

In order to measure unemployment, one has to determine the economically active population and the non-economically active population from the entire population of the country (Mncayi, 2016:21). According to Mohr (2014:66), the unemployment rate is obtained by expressing the number of unemployed persons as a percentage of the total number of people willing and able to work (the so-called 'labour force'). See equation below:

$$Ur = \frac{Number\ of\ unemployed\ persons}{Total\ labour\ force} \times 100$$

This equation reflects unemployed individuals divided by the total labour force. Figure 2.7 below shows the model that was used to determine the economically active population and the non-economically active population from the entire population of the country, and how unemployment rate is calculated:

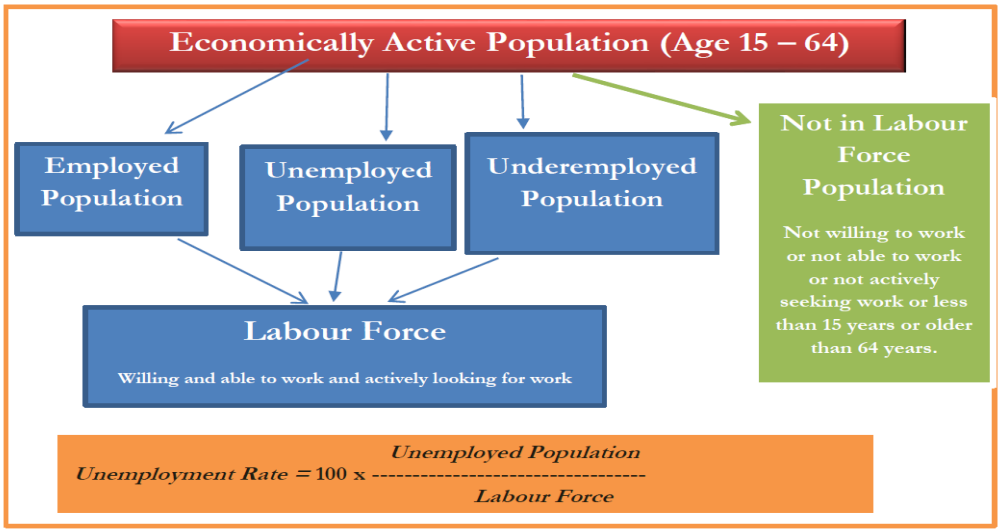

Figure 2.7: Calculation of unemployment

Source: Adopted from National Bureau of Statistics (2016:2)

Although the equation provided in the model has been used to calculate unemployment in many countries, the equation has been criticised for not reflecting the true nature of the unemployment

for a specific region (Mncayi, 2016:21). As a result, the following methods of measuring unemployment were developed.

- **Census method**

This approach involves counting or directly estimating the number of those who are unemployed and those who are employed. This method has weaknesses, such as inaccurate records, which lead to undervaluation of the real unemployment rate owing to the fact that these censuses are only conducted every five years. During the period of five years, many changes occur in terms of the unemployment status of the citizens (Mohr, 2014:498).

- **Registration method**

This method involves individuals who are unemployed and registering their employment status with the Department of Labour. In most cases, these people register their unemployment status with the intention of securing unemployment benefits or obtaining assistance by the Department for Employment Placement. The registration method has a weakness in that it is difficult to compare the unemployment information collected in one country with that of another country due to differences in national legislations. In addition, not all unemployed individuals register at the Department of Labour owing to discouragement that they would not be placed in employment and owing to a lack of money to be used for expenses incurred during the registration process (Mncayi, 2016:22). Mohr (2014:498) adds that in South Africa, the unemployment information obtained through the registration method is insignificant as few unemployed people qualify for unemployment benefits, which results in a large number of unemployed people not registered with the Department of Labour.

- **Survey method**

With the survey method, members of the households are asked to disclose their economic status, the size of the labour force and the number of unemployed individuals per household. Thereafter, the unemployment rate is estimated. The survey method is weak in that there might be inaccuracies in respect of responses, sampling processes as well as seasonal adjustments. In addition, the survey method also has a weakness that the sample is sometimes so small that it is not representative of the larger population (Mncayi, 2016:23). In contrast, Wozniak and Adamczyk (2014: 3) argue that

the survey method is less protective and self-reporting so that the information provided is more accurate than the information provided by using the other methods.

Because of its advantages of being less protective and self-reporting as well as the accuracy of the information provided, the survey method was used in this study when determining whether SMMEs contribute to the reduction of unemployment in Rustenburg or not.

Having discussed the nature and measure of unemployment, the following section discusses the nature and measure of poverty.

2.6 THE NATURE OF POVERTY

Poverty is the condition whereby one lacks a typical or generally acceptable amount of money or possession of materials. It is said to exist when people lack the means to satisfy their basic needs, which are necessary for survival and is reflected in a prevailing standard of living in the community. Conditions of poverty include poor health, low levels of education or skills, an unwillingness to work, high rates of disruptive or disorderly behaviour, and an inability to provide for future needs (Cobbinah *et al*., 2013:25; Umaru & Tende, 2013:1583). In addition, Fourie (2012:20) asserts that poverty is a multidimensional deprivation of resources, which include human capital, household assets, access to services, debt vulnerability, geo-social integration, informal and formal networks, health issues, day-to-day household reserves, and monetary shortage.

Although poverty is a diverse and dynamic concept, it is generally referred to as a lack of monetary or non-monetary resources. In monetary terms, poverty is linked to insufficient income to buy the necessary products for survival. In non-monetary terms, poverty is associated with poor access to public services and personal assets, social isolation, poor education, poor health, and exposure to crime (Jansen, Moses, Mujuta &Yu, 2015:151). One element of poverty is social exclusion, which is the deprivation and downgrading of the specific groups within society. For instance, individuals may be excluded from permanent employment, formal housing, good health, education, democratic participation, and membership of social groups. As a result, social exclusion can escalate the poverty levels of individuals (Jansen *et al*., 2015:151). According to Todaro and Smith (2015:226), "absolute poverty" is a situation of being unable or only barely able to meet the subsistence essentials of food, clothing and shelter, and this type of poverty is mostly found in African countries.

Fourie (2012:19) identifies factors that cause households or individuals to get out of or into poverty. These factors include a family member getting (or losing) employment, large initial household size, lack of education and poor or no employment access. Fourie (2012:19) adds that unemployment is the main factor that causes poverty. Harmse (2013:19) contends that in South Africa, several factors cause poverty resulting from people who cannot find jobs, a lack of skills and social capital necessary to attract employment, a lack of education and skills of new entrants to the labour force and ongoing corrupt activities, especially in the public sector. Therefore, poverty has a serious socio-economic and social impact towards individuals, and more has to be done in order to reduce its impact. SMMEs are identified as the solution to the poverty epidemic that South Africa specifically and the world at large are facing (Sobrinho, 2016:1).

Despite the acknowledgement that poverty has a negative influence on economic development, measuring poverty is very complex because of its multidimensional nature (Jansen *et al*., 2015:151). Various methods of measuring poverty are indicated in the Table 2.5.

Table 2.6: Methods of measuring poverty

Methods	Author	Explanation
Absolute poverty approach	Todaro and Smith (2015:226)	This approach utilises the absolute poverty lines, which define the poor based on an absolute standard applied to income or expenditure. Absolute poverty is a situation characterised by multidimensional deprivation of basic human needs, such as food, clothes and shelter.
Relative poverty approach	Jansen *et al.* (2015:152)	This approach involves identifying the poorest segment of the population by means of a relative poverty line. Relative poverty is the condition in which people lack the minimum amount of income needed in order to maintain the average standard of living in the society in which they live.
Subjective poverty approach	Jansen *et al.* (2015:152)	In this approach, individuals make self-assessments on whether or not they feel poor and give out their perceptions about their well-being or poverty status. A survey of a representative sample of the population is carried out to gauge the opinion of the population in order to define the poverty line.
Headcount ratio	Todaro & Smith (2015:226)	This is the ratio of the number of poor people to the total population. This gives the proportion of the population with income below the poverty line.

		The poverty line can be an international threshold ($1.25 per day; $2 per day), or a national poverty line (varies by country.)
Multidimensional poverty index	Jansen *et al.* (2015:152)	This is a measure of poverty designed to capture the multifaceted deprivations that each poor person faces with respect to education, health and other aspects of living standards. It uses micro data from household surveys, and each person in a specific household is classified as poor or non-poor depending on the number of deprivations his or her household experiences.

Source: Compilation of explanations by Jansen et al. (2015:152) and Todaro and Smith (2015:226)

Although there are many approaches for measuring poverty as indicated in Table 2.7, the subjective approach has been found to provide a comprehensive spectrum of the poverty status of respondents (Jansen *et al.*, 2015:154). Hence, the subjective approach was used in this study to determine the extent of poverty that the people in Rustenburg face and the way SMMEs are contributing to reducing the levels of poverty in the area.

Despite the significant improvements in reducing poverty through SMMEs over the past half century, there is widespread poverty in developing countries. Therefore, more than 1.2 billion people live on an income of less than $1.25 per day (Todaro & Smith, 2015:216). In South Africa, almost 20% of the population is living in extreme poverty at an income of less than $1.25 per day (Harmse, 2013:16). Therefore, it is important for the developing countries to consider improving policies of reducing poverty in their respective countries. Todaro and Smith (2015:216) identified the following reasons for the importance of policies to prioritise focusing on poverty reduction:

- Widespread poverty creates conditions in which the poor have no access to credit, while the rich people in the poorest countries are not noted for their desire to save and invest part of their income in the local economy.
- The low levels of living for the poor could lead to a slower-growing economy. Enhancing the income levels of the poor stimulates an overall increase in the demand of the domestic products.

- A reduction in poverty in the economy is regarded as a powerful material and psychological incentive that could attract public participation in the development process of the local economy.

It can therefore be concluded that people who live in poverty are denied opportunities to become entrepreneurs or SMMEs owners that could otherwise help to reduce their own level of poverty. As a result, poor individuals become poorer due to a lack of socio-economic means that could improve their own levels of poverty.

In this section, light has been shed on what constitutes economic development, its measurement and the benefits thereof. However, in order to sustain economic development, SMMEs have been identified as the drivers of economic development (Radipere, 2012:44). Therefore, the next section discusses the role that SMMEs play in economic development from the empirical perspectives.

2.7 ROLE OF SMMEs IN ECONOMIC DEVELOPMENT – EMPIRICAL PERSPECTIVES

SMMEs play similar roles in both developed and developing countries, and they play a significant role in economic development. Many scholars have conducted studies in order to determine the role SMMEs play in economic development of different countries. For example, Syed, Ahmadani, Shaikh, Shaikh (2012), Maloka (2013), Opafunso and Adepoju (2014), Bouazza (2015) and Nkwinika and Munzhedzi (2016) conducted studies on the role of SMMEs in economic development. These studies revealed a positive correlation between the number of SMMEs and economic development.

According to Taiwo and Ayodeji (2012:18), SMMEs enhance economic development through their contribution to the achievement of the growth objectives of both developed and developing countries. SMMEs are the potential sources of employment and income in many countries. They have the ability to adapt more easily to market conditions than their large-scale competitors as a result of their broadly skilled technologies. Furthermore, SMMEs are able to withstand adverse economic conditions because of their flexible nature, and they are more labour-intensive than larger firms. As a result, SMMEs have lower capital costs associated with job creation, and they are able to improve the efficiency of domestic markets and make productive use of scarce resources, thereby facilitating economic development. Ilegbinosa and Jumbo (2015:204) add that, having the ability to use resources productively, SMMEs operating in economies that undergo

economic transformation could contribute to the effectiveness of the process of denationalisation and restoration of properties. Countries that undergo economic transformation differ in terms of the size of economies of scale. Therefore, other countries need few activities of economies of scale and others need more activities of economies of scale and the size of these distributions are greatly influenced by SMMEs.

Kusi, Opata and Narh (2015:710) assert that SMMEs attract funds that are inactive in the economy and value resources that cannot be used by larger firms. Savlovschi and Robu (2011:278) accentuate that SMMEs are the nurseries that produce larger firms. Many larger firms start as SMMEs and then grow up and become large firms. Without SMMEs, a country could have very few large firms, which might result in a decline in economic development. For individuals, SMMEs are regarded as the source of the first job and the first step in their career. For entrepreneurs, SMMEs are the source of their existence as most entrepreneurs start as SMME owners. For the economy as a whole, SMMEs represent the implementation of new ideas and the collection of processes that increase the effective use of resources. The influence of SMMEs in terms of their contribution to the development of the economy is not limited to the SMME sector. Their influence extends to other sectors of the economy; hence, they are known as the engine for economic development. Kusi *et al*. (2015:710) reaffirm that these businesses are regarded as the natural home of entrepreneurship because of their ability to create an environment that enables entrepreneurs to deploy their talents and skills. These enterprises are the instruments for expressing the entrepreneurial spirit of individuals and they play a pivotal role in distributing economic activities in various countries. Furthermore, having the ability to use mainly the local resources, SMMEs have minimal foreign exchange requirements and adapt easily to customer requirements.

SMMEs have direct access to global and domestic capital markets although they have limited capacity to market their products globally. They incur the same fixed costs as large firms and in most cases, they are regulated. Moreover, some SMMEs are well organised and have paid employees with registered offices while others are not organised; hence, they have temporary structures, operate from homes, employ few workers, and in some cases do not have salaried workers (Kusi *et al*., 2015:710).

According to Abor and Quarter (2010:223) and Bouazza (2015:5), SMMEs make a significant contribution in addressing the socio-development challenges of various economies as these

businesses contribute to the characteristics of economic development, such as income, productivity and employment, which in turn lead to an increase in GDP. The number of employees, turnover, assets and liabilities and costs, and sales that SMMEs generate allow these businesses to contribute to economic development more efficiently than large firms. Therefore, the current study aimed to determine how SMMEs affect economic development.

Radipere (2012:44) and Thobekani (2016:33) note that SMMEs are regarded as productive drivers of economic development, which involves development of new markets, new products, innovation and new technology. According to Farajollahzadeh, Noorinasab and Yazdanpanah, (2016:199) and Bouazza (2015:5), SMMEs are regarded as instruments for promoting industrial development for both developed and developing countries as they are known as the model of economic development.

Although economic development can be achieved through the availability of natural resources, labour and capital in the specific economy, these factors of production are insufficient. Therefore, there is always a need for people to combine and organise these factors of production through the establishment of SMMEs, thereby achieving macroeconomic objectives (Lucky & Olusegun, 2012:487; Mohr, 2014:56). Furthermore, Mmbengwa, Groenewald and Van Schalkwyk (2013:2459) posit that without the existence of SMMEs, unemployment and poverty would have been extremely high worldwide. These businesses contribute to the reduction of inequality by enabling both the rich and the poor to participate actively in the mainstream economy, thereby creating decent jobs, especially for those who are disadvantaged.

According to Mohr (2014:56), SMMEs play a role in achieving the macroeconomic objectives of various economies worldwide. Therefore, they play a role in the increase in the total production of goods and services from one period to another and they create employment. In addition, SMMEs contribute to a reduction in inflation by providing goods and services to consumers. Hence, they stabilise the balance of payments and promote the equitable distribution of income in the country. SMMEs also contribute directly to aggregate savings and investment of many countries (Taiwo *et al*., 2012:18). Furthermore, SMMEs contribute to economic development by providing goods and services. Without SMMEs, big companies may not be able to meet the demand for goods and services in an expanding customer base; hence, resulting in improved competition and entrepreneurship. Having SMMEs as the main providers of goods and services in the country,

plays a role in satisfying citizens' material needs. These businesses are also the main instruments by which new entrepreneurs provide the country with a continuous supply of ideas and skills by training others to become entrepreneurs too (Katua, 2014:464).

Because of their creative and innovative capabilities, SMMEs have advantages in terms of management functions, such as decision-making, motivation, effective use of technology and flexibility in responding to new market opportunities (Love & Roper, 2015:29). Through the substitution of imports and export earnings, SMMEs contribute to the trade balance and positive change in the market. SMMEs contribute to an increase in GDP, employment generation and poverty reduction through an increase in turnover as well as the effective use of assets (Wonglimpiyarat, 2015:297).

SMMEs play a critical role in the transition from agriculture-led economies to industrial-led economies. Moreover, SMMEs facilitate this transition by providing opportunities for processing activities, which may result in the generation of sustainable sources of revenue and improvement of the development processes of the country. These businesses expand the productive capability of the country by absorbing productive resources from all levels of the economy. SMMEs also assist in the establishment of flexible economic systems in which small and large firms are able to support each other. Such support is crucial for the attraction of foreign direct investments (Farajollahzadeh *et al*., 2016:199).

According to the European Commission (EC) (2015:3), SMMEs play a significant role in EU exports to the world and the United States. Most importantly, SMMEs represent a significant segment of the exporting community and of the value of total EU exports. About 633 000 SMME firms are exporters across the EU and they make up almost 80% of all EU exporters.

According to Yoshino and Hesary (2016:3), SMMEs influence trade across regions. Therefore, they account for 30% of the total export value of Asia. In China, these businesses contribute 41.5% of the country's total exports. In Thailand, SMMEs account for 28.8% of all exports. Therefore, these SMMEs are recognised as contributors to the global supply chain through the promotion of international trade and mobilisation of domestic demand.

In this section, the role of SMMEs in the economic development has been discussed. Research indicates that SMMEs play a significant role in sustaining economic development in both developed and developing countries. Due to recognition of SMMEs as the drivers of economic

development, the South African government has embarked on supporting SMMEs with the intention of boosting the economic development of the country (Thobekani, 2016:33).

2.8 CONCLUSION

This chapter provided a discussion on the heterogeneous nature of SMMEs and economic development as well as the role of SMMEs in economic development. This chapter comprised into six sections. From the outset, the background and nature of SMMEs in both developed and developing economies were discussed. The second and third sections constituted a set of material, which relates broadly to the concept of economic development and the role of SMMEs from economic development theoretical perspectives, as well as measurement and benefits of economic development.

The nature of unemployment was examined in the fourth section. This examination covered the definitions of unemployment, its types and measurements, as well as its influence on economic development globally. The fifth section discussed the nature of poverty, which included the definition, measurements and influence of poverty on economic development globally. Lastly, the role of SMMEs on the economic development from the empirical perspectives was investigated.

Chapter 3 explains the research methodology used in the empirical part of the study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on the research methodology employed in the study of the role of SMMEs on the economic development of Rustenburg. The chapter outlines the research design, research approach, population and sample, data collection instruments, data analysis methods, sources of data, validity and reliability, and ethical considerations of the study.

Research methodology is crucial to any research endeavour as it controls the study, determines how the data are collected and organised. The research methodology also sets up methods for analysing the data collected, suggests the approach for interpreting its meaning, and finally, draw conclusions that lead to an expansion of knowledge. Therefore, the objectives of the research methodology are to dictate and control the acquisition of data, to organise the data after their acquisition, and then extract the meaning from it (Leedy & Ormrod, 2010:6). Therefore, research methodology refers to the procedures used in the process of the research plan. These include the data collection instruments and data analysis procedures applied in the research process (Saunders, Lewis & Thornhill, 2009:3).

3.2 RESEARCH DESIGN

The researcher used a descriptive research design in which the perceptions of the respondents of the role of SMMEs on economic development were measured. According to Mouton (2005:55), a research design is a plan or blue print of how the researcher intends to conduct the research. Similarly, Van Zyl (2013:397) defines a research design as a method and structure of an investigation chosen by the researcher to conduct data collection and analysis. Bless and Higson-Smith (2013:130) assert that it is unthinkable to embark on a research project without a research design, as it is a clear plan that directs the researcher how to conduct the intended research; and that the descriptive research design enables the researcher to analyse various cases from the study participants, thereby obtaining sufficient information. It also allows the researcher to focus on the

exact characteristics under consideration; as well as yields quantitative information that will be analysed statistically.

Descriptive research is research for which the purpose is to produce an accurate representation of persons, events or situations that allow the respondents to provide information about what, when, where and how the phenomenon in question takes place (Saunders *et al*., 2009:590). Therefore, descriptive research attempts to describe systematically a situation, problem, phenomenon and what is prevalent with respect to the issue or problem under study (Kumar, 2014:13). The motive for selecting a descriptive research design in this study was to assist the researcher critically to investigate how SMMEs play a role in the economic development in Rustenburg.

3.3 RESEARCH APPROACH

According to Welman, Kruger and Mitchell (2005:8), there are two approaches to research, namely, the quantitative and qualitative approaches. Maree (2013:145) defines a quantitative approach as a process that is systematic and objective in its ways of using numerical data from only a selected subgroup of a universe (known as sample) to generalise the findings to the universe that is being studied. The subgroup of SMMEs that are registered with the Rustenburg Local Municipality was selected as participants to the study, and the findings of the study were generalised to the entire Rustenburg area.

Kumar (2014:14) underscores that the quantitative approach follows a rigid, structured and predetermined set of procedures to explore, quantify the extent of variation in a phenomenon, emphasise the measurement of variables and the objectivity of the process, give importance to the validity and reliability of the research findings, and communicate the research findings in an analytical manner. Welman *et al*. (2005:8) assert that the quantitative approach emphasises the measurement and analysis of causal relationships between variables within a value-free context and its purpose is to evaluate objective data consisting of numbers.

One of the major differences between quantitative and qualitative approach is that in a quantitative approach there are a number of methods that can be used to measure attitudes and their intensity. Conversely, a qualitative approach lacks rigid and structured methodology and cannot measure the intensity of the attitudes (Kumar, 2014:209). As a result, a quantitative approach was used in this study to determine the extent to which SMMEs contribute to economic development.

In view of the main objective of this study, which is to examine the role of SMMEs in economic development of Rustenburg, the researcher did not only focus on measuring the role of SMMEs in economic development, but also the extent to which SMMEs play a role in economic development. Hence, the variables used were quantitative in nature rather than qualitative, in order to measure their extent. De Vos (2011:216) asserts that the goals of a quantitative approach in the research process are to describe the trend or explain the relationship between the independent and dependent variables. In addition, quantitative research seeks to determine the extent of a problem, issue or phenomenon, as well as to allow all the elements of the research process, namely, the objectives, design, and measuring instruments, to be predetermined. Therefore, the quantitative approach was selected as it enabled the researcher to test the association between SMMEs and economic development, and determine the extent to which these SMMEs contribute to economic development.

3.3.1 Population and sample

Levine, Krehbiel and Berenson (2015:120) explain a population as the entire pool of items or individuals from which the researcher wants to draw conclusions. According to Biekpe (2006:5), it is estimated that there are more than 2.5 million SMMEs in South Africa. However, this study only focused on Rustenburg, in the North West, which has 223 registered SMMEs (Rustenburg Local Municipality Database, 2014–2016). The researcher used 213 registered SMMEs in the Rustenburg Local Municipality as its target population (census). The remaining 10 SMMEs were used in the pilot study. According to Saunders *et al.* (2009:210), a census approach involves the collection of data from every possible member of the population. The researcher used 213 members as respondents in the study, as the size is manageable. Saunders *et al.* (2009:212) contend that it is possible to collect data from the entire population if it is a manageable size. SMME owners or managers were identified as the unit of analysis of the study.

Table 3.1 below indicates the types of SMMEs that were used in the study as the target population and sample.

Table 3.1: Categories and size of target population/sample

Types of enterprises	Total population/Sample	Percentage of the total population
Construction	32	(32/213*100) = **15%**
Manufacturing	43	(43/213*100) = **20%**

Mining	11	(11/213*100) = **5%**
Services	53	(53/213*100) = **25%**
Agriculture	21	(21/213*100) = **10%**
Wholesale and retail	53	(53/213*100) = **25%**
TOTAL	**213**	**100%**

Source*: *Compilation from Rustenburg SMMEs database (2016)

3.3.2 Data collection instruments

Various instruments can be used for collecting data in descriptive surveys, such as face-to-face interviews, telephonic interviews and questionnaires (Maree, 2013:55). According to Gray (2013:352), a questionnaire is a research instrument with which the respondents are asked to answer the same set of questions in a predetermined order. The use of a questionnaire is appropriate when the researcher requires an analytical approach to explore relationships between variables. Against this background, a validated structured questionnaire was used in this study as an instrument for the collection of data. The selection of this instrument was based on the fact that a properly constructed questionnaire yields a high measurement of reliability and validity (Mouton, 2005:123). Besides, Creswell (2013:85) and Gray (2013:352) reaffirm that the popularity of questionnaires as an instrument for data collection is based on some of the inherent advantages, which include the fact that the questionnaire can be sent to a large number of respondents at a relatively low cost. Therefore, a questionnaire fitted well in this study, and questionnaires were sent to 213 respondents.

The questionnaire was comprised of five-point Likert-type scale questions. The Likert-type scale is a variation of the summated rating scale and consists of statements that indicate either a favourable or an unfavourable attitude to the research subject (Cooper & Schindler, 2009:378; Tustin, Ligthelm, Martins & Van Wyk, 2005:408). Each response is given a numerical score reflecting its degree of attitudinal favourableness. The scores of the respondents from a well-defined sample or population can be compared. Responses on the Likert-type scale can be treated either as ordinal or as interval (Leedy & Ormrod, 2005:185). Responses to a single Likert-type item are normally treated as ordinal data. Especially when using only five levels, a researcher cannot assume that the respondents perceived the difference between adjacent levels as intervals.

With five-point Likert-type scale questions, it is possible to derive quantitative data from primary qualitative data on an ordinal scale. This scale is the most widely used scale in survey research and is often used for questionnaires (Maree, 2013:167). When responding to a Likert-type questionnaire item, the respondents should specify their level of agreement or disagreement with a statement. The five-point Likert-type scale questions consisted of the range of responses between 1 and 5; 1 being the lowest (Strongly disagree) and 5 being the highest (Strongly agree). This provided respondents with opportunities to choose the alternatives that best represented their degree of agreement or disagreement about the role that SMMEs play in the economic development of Rustenburg.

The first section of the questionnaire consisted of questions about the demographic background of the SMME owners. The demographic factors that were considered were age group, gender and the level of education. The demographic data assisted the researcher to assess whether the correct respondents completed the questionnaires. Furthermore, the demographic data were used to break down the overall survey response data into meaningful groups of respondents.

The second section of the questionnaire consisted of investigative questions aimed at exploring the correlations between the constructs and the set of behaviours. The investigative questions mainly concerned the standard of living, poverty alleviation and employment creation. These investigative questions assisted the researcher to determine the role of SMMEs in economic development and the extent to which SMMEs contribute to economic development.

The use of a questionnaire in this study had the advantage that it was comparatively inexpensive and convenient, as the researcher did not interview the respondents. As a result, the researcher saved time, as well as human and financial resources. In addition, the questionnaires also offered greater anonymity as the respondents did not disclose the name of their businesses on the questionnaires, which also increased the likelihood of obtaining accurate information (Kumar, 2014:181).

3.3.3 Data collection procedures

A pilot study was conducted before the full-scale data collection exercise. It is the ‘dress rehearsal’ for the main study, used for assessing the feasibility of the study and for testing the measuring instrument (De Vos, Fouche & Delport, 2016:73). Most importantly, piloting the questionnaire assisted in identifying weaknesses in the questionnaire, for example, the sequence of questions,

unclear instructions given to respondents, and the use of incorrect scales and question formats (Gray, 2013:373). In a pilot study, the researcher involves a small number of respondents from the actual population from which the sample is to be drawn (Du Plooy-Cilliers, Davis & Bezuidenhout, 2016: 257).

A sample of ten SMME owners was requested to participate in the pilot study. Saunders *et al.* (2009:394) recommend that a minimum of ten participants in the pilot study is sufficient to test the understanding of participants in answering the questions in the questionnaire and to determine whether the participants follow all instructions correctly. In order to ensure a representative sample for pilot study, the percentages of each category of the population were used to calculate the number of respondents for the pilot study as indicated in Table 3.2.

Table 3.2 Calculation of the size of pilot study sample

Types of enterprises	Percentage of the total population	Calculation of the size of pilot study sample
Construction	15%	(0.15*10) = 2
Manufacturing	20%	(0.2*10) = 2
Mining	5%	(0.05*10) = 1
Services	25%	(0.25*10) = 2
Agriculture	10%	(0.01*10) = 1
Wholesale and retail	25%	(0.25*10) = 2
TOTAL	**100%**	**10**

Source: Author's own compilation

The results of the pilot study did not show any weaknesses and respondents seemed to have clearly understood the instructions as stipulated on the questionnaires. The pilot study was completed in two days.

The main data collection exercise took one month. Two hundred and thirteen (213) copies of questionnaires were distributed by the researcher. One hundred and eighty two (182) completed questionnaires were returned, which represented an 85% response rate. The study yielded the Cronbach alpha values of 0.903, 0.883 and 0.800 for economic development, employment generation and poverty reduction respectively. This means that all the data collected were

considered reliable. The researcher was able to get the telephone numbers and email addresses of those participants who requested to complete the questionnaires at times convenient for them. The researcher used these telephone numbers and email addresses to follow-up on outstanding questionnaires.

3.3.4 Data analysis

After collecting the data by using a questionnaire, the researcher then involved a statistician to analyse the data by using descriptive and inferential statistics. Bless and Higson-Smith (2013:264) explain the difference between descriptive and inferential statistics as follows.

> Descriptive statistics are simply procedures for condensing information about a set of measures whereas, inferential statistics refer to techniques for making statements and decisions on the basis of numerical information relating samples to populations.

According to Brown (2010:49), the researcher has to understand descriptive statistics prior to using inferential statistics because descriptive statistics are the basis upon which inferential statistics are built. Therefore, inferential statistics are used as building blocks for descriptive statistics. Brown (2010:349) further maintains that when analysing data, inferential statistics are complemented by descriptive statistics, in such a way that conclusions drawn from an inferential analysis require supporting information in order to give the researcher the direction and understanding of the research results. This information is usually provided by descriptive statistics.

The statistician utilised the Statistical Analysis Software (SAS) to analyse the data. Firstly, the general characteristics of the data were described by constructing a distribution of scores on the perceptions of SMME owners regarding the role of SMMEs in the economic development of the Rustenburg Local Municipality. This allowed the researcher to obtain a first impression of the data. Thereafter, a comparison of the distribution of scores was conducted by measuring the central tendency, dispersion or variability, by computing the mean, median and standard deviation scores (Drew, Hardman & Hosp, 2008:195; Van Zyl, 2013:182). In this way, the researcher gained an in-depth understanding of the variations in the distribution of scores.

Inferential statistics were also utilised in the study. This method helped the researcher to determine and examine the strength of the relationship between the independent variable (SMMEs) and the dependent variables (economic development, employment generation and poverty reduction) of the study. There are many types of inferential statistics, such as t-tests, analysis of variance

(ANOVA), regression analysis, general linear model (GLM) and chi-square tests. The general linear model and ANOVA were used in the study. Moreover, the ANOVA approach allowed the researcher to determine the difference between two or more groups of respondents in terms of the role of SMMEs in economic development in the Rustenburg Local Municipality (Levine & Berenson, 2015:189). The general linear model was used to measure the extent and strength of the relationship between the independent variable, which is SMMEs, and the dependent variables, which are economic development, employment generation and poverty reduction (Kahane, 2008:356).

3.3.5 Data sources

Both primary and secondary data were used to conduct this empirical study. Primary data is the data collected from the source by the researcher, and these data have not been filtered or interpreted by a second party (Cooper & Schindler, 2009:256). In this study, the primary data was obtained from the SMME owners identified as respondents for the study. On the contrary, secondary data is the data that has previously been collected and can assist the researcher to interpret the primary data such as review papers, textbooks and encyclopaedias (Cooper & Schindler, 2009:256). The use of diverse data sources facilitated sufficient exploration of the phenomenon of the role of SMMEs in economic development of the Rustenburg Local Municipality and gave the researcher in-depth knowledge and understanding of the phenomenon under investigation.

3.4 VALIDITY AND RELIABILITY

The validity of the study means that the study must measure what it is intended to measure (Gray, 2013:375). To ensure validity of the study, a comprehensive review of key literature was conducted to determine the roles of SMMEs in economic development and these roles were integrated in the instrument. The questionnaire was subjected to the evaluation of the research supervisor. In addition, the questionnaire was also piloted in order to validate the questions and to ensure that it measures what it is intended to measure. Furthermore, the researcher made use of a statistician to test the results of the pilot study for consistency before the questionnaires were distributed.

Reliability is an indication of the consistency of the results between two or more studies, which measure the same variables (Gray, 2013:375). Cooper and Schindler (2009:374) indicate that the Cronbach's alpha can be used to test for reliability. Cronbach's alpha measures the extent to which

the instrument items reflect the same underlying constructs (Cooper & Schindler, 2009:374). The questionnaire for this study was tested for reliability using Cronbach's alpha test, before using it in the main part of the study. The results yielded the Cronbach alpha values of 0.903, 0.883 and 0.800 for economic development, employment generation and poverty reduction respectively. This meant that the questionnaire was considered reliable.

3.5 ETHICAL CONSIDERATIONS

Owing to the fact that this study involved human beings, prior to the commencement of the research process, the researcher obtained permission from the Unisa Research Ethics Review Committee to conduct the study. Throughout the research process, the researcher adhered to the ethics guidelines.

The researcher explained to the respondents that participation was voluntary, and that they could withdraw from the study at any time without any penalties. Before distributing the questionnaires, the researcher obtained verbal informed consent from the respondents. The researcher also ensured that respondents were not exposed to any undue physical or psychological harm, by striving to be honest and respectful towards all respondents.

Both the researcher and the respondents had a clear understanding of the confidentiality of the results of the study. All the information and responses available during the study were kept private and anonymous, in order to protect the identities of the respondents.

3.6 CHAPTER SUMMARY

Chapter 3 discussed the research methodology used in the empirical part of the study. The chapter focused on the research design, population and sample, data collection methods, and analysis procedures. Furthermore, the chapter discussed sources of data, validity and reliability, as well as ethical considerations for the study. Chapter 4 focuses on data analysis, presentation and discussion of findings.

CHAPTER 4

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.1 INTRODUCTION

Chapter 3 described the methodology employed in this research, covering aspects such as research design, research approach, population and sample, data collection instruments, data analysis methods, sources of data, validity and reliability, and ethical considerations of the study. The purpose of Chapter 4 is to present, analyse and interpret the empirical findings of the study. The statistical results are presented in terms of the description of the participants, descriptive statistics, inferential statistics (general linear model), and correlation (Pearson correlation test).

This chapter is divided into ten sub-sections. Sub-section 4.1 presents empirical findings on demographic variables comprising age groups, gender and educational qualifications. Sub-section 4.2 presents the profile of SMMEs in terms of the type of ownership, the nature of the industry in which SMMEs fall, the types and trends of employment in the SMME sectors, the value of the annual turnover and current assets, and years in business of SMMEs. The empirical findings on the perceptions of SMME owners of the role of SMMEs in economic development, employment generation and poverty reduction are presented in sub-sections 4.3, 4.4 and 4.5 respectively. Sub-section 4.6 focuses on the validity of the measuring instrument (questionnaire), which presents factor analysis results and Cronbach's alpha test for reliability.

Sub-section 4.7 presents inferential statistics for the relationship between economic development, employment generation and poverty reduction. Data on the significant differences between SMMEs and continuous variables of economic development, employment generation and poverty reduction are presented by using ANOVA in sub-section 4.8. Sub-section 4.9 focuses on the Tukey's studentised range (HSD) test results, which compare the mean score of each SMME sector in terms of significant differences regarding its contribution to economic development, employment generation and poverty reduction. Sub-section 4.10 gives a summary of the chapter.

4.2 EMPIRICAL FINDINGS

The objective of this section is to present empirical results of this study. The section on empirical results is divided into ten sub-sections.

4.2.1 Response rate

According to Rustenburg Local Municipality (2016b), there were 223 registered SMMEs. The researcher used 213 registered SMMEs as the target population (census) and 10 for the pilot study. The population of the registered SMMEs for each type from which data were collected is shown in Table 4.1. To indicate the success rate of the data collection exercise, the results of the response rate are also presented in the same table.

Table 4.1: Categories and sizes of target population/sample

Types of enterprises	Total population/sample	Respondents	Response rate
Construction	32	23	72%
Manufacturing	43	35	81%
Mining	11	9	82%
Services	53	52	98%
Agriculture	21	13	62%
Wholesale and retail	53	50	94%
Total	**213**	**182**	**85%**

According to Saunders *et al.* (2009:210), a census approach involves the collection of data from every possible member of the population. The researcher used all 213 members as respondents in the study as the size was manageable. SMME owners or managers were identified as the unit of analysis of the study. Table 4.1 shows that out of 213 questionnaires, 182 of them, constituting 85%, were retrieved. Therefore, the sample size of 213 respondents and the overall response rate of 85% were adequate for the study and allowed the researcher to make deductions about the role of SMMEs in the economic development of Rustenburg.

4.3 THE DEMOGRAPHICS

The demographic variables for which data were collected included age, gender and educational levels. The demographic information was used to get insight into the characteristics of the respondents. The findings are presented in the tables that follow.

4.3.1 Distribution of respondents according to age group

Table 4.2 presents the distribution of respondents according to age group.

Table 4.2 Distribution of respondents according to age, N = 182

What is your age group?		
Parameter	**Frequency**	**Per cent**
Below 30 years	25	13.74
30–40 years	62	34.07
41–50 years	58	31.87
Above 50 years	37	20.33
Total	**182**	**100**

Respondents between 30 and 40 years old in this study constitute the largest age group (34.07%), while respondents aged below 30 years constitute the lowest age group (13.74%).

4.3.2 The gender composition of the respondents

Table 4.3 presents the gender composition of the respondents.

Table 4.3: The gender composition of the respondents, N = 182

What is your gender?		
Parameter	**Frequency**	**Per cent %**
Male	145	79.67
Female	37	20.33
Total	**182**	**100**

Results in Table 4.3 show that males dominated in the SMME sector (79.67%).

4.3.3 The educational qualifications of the respondents

Table 4.4 presents the educational qualifications of the respondents.

Table 4.4: Educational qualifications of the respondents, N = 182

What is your highest level of education?		
Parameter	**Frequency**	**Per cent**
Degree	36	19.78
Diploma	56	30.77
Grades 8–12	61	33.52
Grades 1–7	22	12.09
No formal education	7	3.85
Total	**182**	**100**

As shown in Table 4.4, the majority of the SMME owners in Rustenburg had acquired between Grades 8 and 12 (33.52%), and only 3.85% of the total number of respondents had no formal education.

4.4 CHARACTERISTICS OF THE BUSINESSES

In order to determine the characteristics of the SMMEs operating in Rustenburg, variables such as the types of ownership, the nature of the industry in which SMMEs operate, whether SMMEs operate part-time or full-time, the employment trends of SMMEs, turnover and current asset values, and the duration of the operations of the SMMEs, were analysed.

4.4.1 The types of ownership of SMMEs

Table 4.5 presents the types of ownership of SMMEs.

Table 4.5: The types of ownership of SMMEs, N = 182

What is the type of ownership of your business?		
Parameter	**Frequency**	**Per cent**
Sole-owner	51	28.02
Partnership	57	31.32
Private company	74	40.66
Total	**182**	**100**

Table 4.5 indicates that the majority of SMMEs in Rustenburg (40.66%) are registered as private companies, while 31.32% are registered as partnerships and 28.02% as sole-owners.

4.4.2 Nature of industry in which SMMEs fall

Table 4.6 presents the nature of industry in which SMMEs operate.

Table 4.6 Nature of industry in which SMMEs fall, N = 182

What is the nature of the industry within which your business falls?		
Parameter	**Frequency**	**Per cent**
Construction (1)	23	12.64
Manufacturing (2)	35	19.23
Mining (3)	9	4.95
Services (4)	52	28.57
Agriculture (5)	13	7.14
Wholesale and Retail (6)	50	27.47
Total	**182**	**100**

From Table 4.6, it is evident that SMMEs that offer services to the communities around Rustenburg dominate in that area, as they constitute 28.57% of the total SMMEs who participated in this study. In contrast, manufacturing SMMEs constitute 19.23% of the total respondents, while construction and agriculture SMMEs are 12.64% and 7.14% respectively. Therefore, it can be concluded that the SMME sector in Rustenburg is diverse. These findings tally with those of a study by Maloka

(2013:75), which found that SMMEs are in different economic sectors ranging from the manufacturing to the service sectors.

4.4.3 Part-time or full-time SMMEs

Table 4.7 presents data on part-time and full-time SMMEs in Rustenburg.

Table 4.7. Part-time or full-time SMMEs, N = 182

Is your business part-time or full-time?		
Parameter	**Frequency**	**Per cent**
Part-time	30	16.48
Full- time	152	83.52
Total	**182**	**100**

Table 4.7 indicates that most SMMEs in Rustenburg operate on a full-time basis (83.52%). Only 16.48% of the SMMEs that participated in this study were found to operate on a part-time basis. This implies that most SMMEs in Rustenburg which operate on a full-time basis, contribute more to economic development, employment generation and poverty reduction in this area than SMMEs which operate on a part-time basis.

4.4.4 Employment trends of SMMEs

Tables 4.8 presents the employment trends of SMMEs operating in Rustenburg for the three years of, 2015, 2016, and 2017.

Table 4.8: Employment trends of SMMEs in 2015, 2016 and 2017, N = 182

How many people have been employed in your business in 2015, 2016 and 2017?						
Parameter	**2015**		**2016**		**2017**	
	Frequency	**Per cent**	**Frequency**	**Per cent**	**Frequency**	**Per cent**
0	20	10.99	32	17.58	49	26.92
1–5	73	40.11	82	45.05	74	40.66
6–50	63	34.62	49	26.92	44	24.18
51–100	17	9.34	11	6.04	9	4.95
101–200	6	3.30	6	3.30	4	2.20
200 +	3	1.65	2	1.10	2	1.10
Total	**182**	**100**	**182**	**100**	**182**	**100**

Table 4.8 indicates the employment trends of the SMME sector in Rustenburg. Looking at the data for 2015, 2016 and 2017, most SMMEs in Rustenburg employed between one and five employees, followed by those SMMEs that employed between six to 50 employees. Very few SMMEs employed more than 200 employees in each year. This constitutes 1.65% in 2015, and 1.10% in both 2016 and 2017.

4.4.5 Total annual turnover of SMMEs

According to the Small Business Act 102 of 1996, annual turnover can be used to classify SMMEs. Hence, annual turnover was one of the variables employed to determine the sizes of SMMEs in Rustenburg. This act classifies micro, small and medium-enterprises as small businesses with an annual turnover of less than R150 000, more than R150 000 to less than R2 million and more than R2 million to less than R4 million respectively.

Table 4.9 presents the annual turnover of SMMEs in Rustenburg.

Table 4.9: Total annual turnover of SMMEs, N = 182

What is the value of the sales of your business per year?		
Parameter	**Frequency**	**Per cent**
Less than R150 000	25	13.74
R150 001–R500 000	27	14.84
R500 001–R1 million	35	19.23
R1 million–R2 million	28	15.38
R2+ million	67	36.81
Total	**182**	**100**

As indicated in Table 4.9, the majority of SMMEs in Rustenburg have an annual turnover of more than R2 million, which represents 36.81% of the total respondents, followed by SMMEs with an annual turnover between R500 001 and R1 million, which constitutes 19.23% of the total respondents. SMMEs with an annual turnover of between R1 million and R2 million, and R150 001 and R500 000 represent 15.38% and 14.84% of the total respondents respectively. Only 13.74% of the total number of respondents have an annual turnover of less than R150 000.

The data presented above seem to be in contradiction to the results from Maloka's study (2013:75), in which it is noted that the majority of SMMEs in South Africa have an annual turnover of less than R150 000. This contradiction might be because this study only focused on SMMEs registered in the database of Rustenburg Local Municipality.

4.4.6 Value of current assets for SMMEs

The Small Business Act 102 of 1996 also uses the value of current assets (gross assets excluding fixed property) to classify SMMEs. Hence, the current asset value was one of the variables used to determine the sizes of SMMEs in Rustenburg. The current asset value of micro-enterprises is less than R100 000, small and medium-enterprises have current asset values of less than R2 million and less than R4 million respectively.

Table 4.10 presents the current asset values of SMMEs in Rustenburg.

Table 4.10: Current asset values of SMMEs in Rustenburg, N = 182

What is the value of the current assets (such as stock and debtors) which are expected to be converted into cash within a year) in your business?		
Parameter	**Frequency**	**Per cent**
Less than R100 000	25	13.74
R100 001–R500 000	19	10.44
R500 001–R1 million	35	19.23
R1 million–R2 million	31	17.03
R2+ million	72	39.56
Total	**182**	**100**

Table 4.10 indicates that most of the SMMEs have a current asset value of more than R2 million (39.56%). In contrast, only 10.44% of the total respondents are classified as micro-enterprises with current assets valued between R100 001 and R500 000. Therefore, it can be deduced that most of the SMMEs in Rustenburg are classified as medium-enterprises.

4.4.7 Number of years in operation of SMMEs

Table 4.11 presents data about the years in operation of SMMEs with an aim of getting an overview of the life span of these businesses.

Table 4.11: Years in business of SMMEs, N = 182

Years in business of SMMEs		
Years	**Frequency**	**Per cent**
1–5 years	61	33.52%
6–10 years	37	20.33%
11–15 years	15	8.24%
16–20 years	29	15.93%
21 years and more	40	21.98%
Total	**182**	**100.00%**

As shown in Table 4.11, most SMMEs had been in existence for fewer than five years (33.52%).

4.5 PERCEPTIONS OF SMME OWNERS ON THE ROLE OF SMMES IN THE ECONOMIC DEVELOPMENT OF RUSTENBURG

The objective of this section was to present respondents' perceptions of the role of small, medium and micro-enterprises (SMMEs) in the economic development of Rustenburg. The mean and standard deviation values are also presented. The mean value of 3 or more means that most of the respondents agreed with the statements provided. Conversely, the mean value of less than 3 means that most of the respondents disagreed with the statements provided. The standard deviations are also presented to indicate the variability of dispersion of the responses from the mean values. The standard deviation of 1 or more is considered high and it indicates that respondents differ significantly regarding the statement provided. On the contrary, a standard deviation of less than 1 is considered low and it indicates that respondents differed less regarding the statement provided. Therefore, the bigger the standard deviation, the bigger the differences in respondents' perceptions, and the smaller the standard deviation, the smaller the differences in respondents' perceptions.

The section forms part of the main investigation of the study, which seeks to answer the question, "What is the role of SMMEs in the economic development of Rustenburg?" The findings also relate to the secondary objective, which aims at determining the activities of SMMEs in Rustenburg.

Table 4.12: Percentages and descriptive analysis of respondents' perceptions of the role of SMMEs in the economic development of Rustenburg, N = 182

	1–2	**3**	**4–5**		
The role of SMMEs in the economic development of Rustenburg	**Disagree**	**Neutral**	**Agree**	**Mean**	**Std. Dev**
Source of income	0%	2.2%	97.8%	4.26	0.489
Provides goods	14.3%	14.3%	71.4%	3.75	0.934
Provides services	19.8%	22.0%	58.2%	3.46	1.049
Provides training in entrepreneurial skills	47.3%	12.6%	40.1%	2.98	1.214
Offers bursaries	64.3%	15.9%	19.8%	2.51	1.101
Contributes to the reduction of crime	11.0%	6.0%	83.0%	3.91	0.977
Develops employees in various skills	8.8%	3.3%	87.9%	3.96	0.846
Pays tax	15.4%	0.5%	84.1%	4.00	1.082

Makes monetary donations to local charitable organisations	38.5%	6.6%	54.9%	3.27	1.288
Participates in influencing government policies for reducing poverty in the local community	73.6%	12.1%	14.3%	2.34	1.026
Makes sponsorships in kind (such as providing equipment and goods or supplies) to the poor in the local community	52.7%	6.0%	41.02%	2.95	1.361

Results in Table 4.12 depicted that the majority of SMMEs are the source of income to the people living in Rustenburg (97.8%). Most of these SMMEs provide training to their employees (87.9%), pay tax (84.1%) and contribute to the reduction of crime (83.0%). In addition, SMMEs play a role in satisfying human needs and wants by providing goods (71.4%) and services (58.2%). Less than half of SMMEs also provide training in entrepreneurial skills to the communities (40.1%), and more than half of these businesses donate to local charitable organisations (54.9%). Less than half of these businesses do sponsorship in kind, such as providing equipment and goods or supplies to the poor in the communities (41.02%).

Only 19.8% of the respondents indicated that their SMMEs offer bursaries to the communities and only a small portion of SMMEs participate in influencing government policies for reducing poverty in the community (28.02%). The standard deviations of the statements of "source of income", "provides goods", "contributes to the reduction of crime", and "develops employees in various skills" are fewer than one per statement. This is considered to be low, meaning that the respondents differed less on the statements provided. This implies that most SMMEs play a role in economic development of Rustenburg mainly as a source of income, by providing goods and reducing crime, as well as by developing employees in various skills.

4.6 PERCEPTIONS OF SMME OWNERS OF THE ROLE OF SMMEs IN EMPLOYMENT GENERATION IN RUSTENBURG

The objective of this section was to present the respondents' perceptions of the role of SMMEs in employment generation. The findings relate to the secondary objective, which aimed at determining the extent to which SMMEs contribute to employment generation in Rustenburg.

Table 4.13: Percentages and descriptive analysis of respondents' perceptions of the role of SMMEs in employment generation in Rustenburg, N = 182

	1–2	3	4–5		
The role of SMMEs in employment generation in Rustenburg	**Disagree**	**Neutral**	**Agree**	**Mean**	**Std. Dev**
Contributes to employment creation	7.7%	2.7%	89.6%	4.09	0.915
Employ full-time employees	13.7%	7.7%	78.6%	3.75	1.002
Employ part-time workers	21.4%	11.0%	67.6%	3.53	1.101
Employ unskilled people	17.0%	11.5%	71.4%	3.58	1.026
Employ qualified people	11.5%	4.9%	83.5%	3.83	0.945
Employ casual workers	26.9%	13.2%	59.9%	3.33	1.108
Has not retrenched employees since 2014	44.0%	7.1%	48.9%	3.10	1.240
Provide employment to family member/s	47.3%	12.01%	40.7%	2.92	1.207

Part-time employment means that a person is permanently employed, but works fewer days per week or fewer hours per day than a full-time worker. A casual employee is a worker employed for a short period and works on some days of the week, for example a domestic worker that only works once a week for 5 hours per day (Mathekga, 2009:4; Buhlungu & Webster, 2005:253).

As shown in Table 4.13, most SMMEs contribute to employment generation in Rustenburg (89.6%) and most of these SMMEs provide full-time employment (78.6%). They also employ part-time workers (67.6%), unskilled workers (71.4%) and qualified workers (83.5%). However, only 59.9% of these businesses employ casual workers. Almost half of these businesses (48.9%) had not retrenched employees since 2014.

Most of the statements have a mean value of more than 3, indicating that most of the respondents agreed with the statements provided. The standard deviations of the statements of "contributes to employment creation" and "employ qualified people" are fewer than 1 per statement, which is considered to be low, meaning that the respondents differed less on the statements provided. This implies that most SMMEs contribute to employment generation in Rustenburg, mostly by employing qualified people.

It is therefore evident that SMMEs create employment of different kinds, which include full-time and part-time workers, qualified and unskilled workers, as well as casual workers.

4.7 PERCEPTIONS OF SMME OWNERS OF THE ROLE OF SMMEs IN POVERTY REDUCTION IN RUSTENBURG

The objective of this section was to present SMME owners' perceptions of the role of SMMEs in poverty reduction in Rustenburg. The findings relate to the secondary objective, which aimed at determining the extent to which SMMEs contribute to poverty reduction in Rustenburg.

Table 4.14: Percentages and descriptive analysis of respondents' perceptions of the role of SMMEs in poverty reduction in Rustenburg, N = 182

	1–2	**3**	**4-5**		
The role of SMMEs in poverty reduction in Rustenburg	**Disagree**	**Neutral**	**Agree**	**Mean**	**Std. Dev**
Participates in construction projects in the community	63.7%	6.0%	30.2%	2.48	1.251
Contributes to educational projects in the community	61.5%	6.6%	31.9%	2.56	1.306
Contributes to health projects in the community.	63.7%	11.5%	24.7%	2.43	1.214
Offers apprenticeships to members of the community	63.2%	6.6%	30.2%	2.51	1.243
Provides funding for environmental projects (such as waste reduction and recycling initiatives) in the local community	68.1%	6.6%	25.3%	2.39	1.215
Offers insurance benefits to its employees	48.9%	11.0%	40.1%	2.81	1.274
Holds fundraising events to support poverty reduction in the community	70.3%	7.7%	22.0%	2.30	1.148
Promotes other local small businesses by informing customers about their products	34.6%	6.0%	59.3%	3.21	1.314

Table 4.14 shows that most SMMEs promote other local small businesses by informing customers about their products (59.3%). Only 40.1% of SMMEs offer insurance benefits to their employees. It is also evident that their contribution to construction, education and health projects in the communities is low, which is represented by 30.2%, 31.9%, 24.7% respectively. Furthermore, their involvement in offering apprenticeships, providing funding for environmental projects, holding fundraising events to support communities is also minimal, which is represented by 30.2%, 25.3%, and 22.0% respectively. The mean values for most of the statements are less than 3, which means that most SMME owners disagree with the statements provided. This is also supported by the

standard deviations of more than 1 for all the statements meaning that respondents differ more on all statements provided. This implies that most SMMEs are not directly involved in reducing poverty. Haupt (2015:3) reaffirms that the government uses the tax money it collects from SMMEs to provide public goods and services to its citizens.

4.8 VALIDITY OF THE MEASURING INSTRUMENT

The validity of the items that measure economic development, employment generation and poverty reduction was constructed in the form of factor analysis.

4.8.1 Factor analysis results

Factor analysis is a technique that is used to decrease a large number of variables into a smaller numbers of factors (Sekaran & Bougie, 2012:161). During the factor analysis process, the highest common variance is extracted from all given variables and grouped into a common score. Therefore, the purpose of factor analysis is to determine the underlying structure among variables of the study.

Three factors were extracted by using the principal axis factoring method. On processing data using the Statistical Analysis Software (SAS) version 9.4 programme, the variables were initially decreased from 27 to 26 by removing the non-loadings defined as items with loadings of < 0.30. The following extracted three factors represent all the variables:

- Economic development (factor 1)
- Employment generation (factor 2)
- Poverty reduction (factor 3).

The factor loadings are presented in Table 4.15.

Table 4.15: Factor analysis results

Questions:	**Factor loadings**		
ECONOMIC DEVELOPMENT	**1**	**2**	**3**
V1. Is my source of income	**0.753**		
V2. Provides goods to the community	**0.406**		
V3. Provides services to the community	**0.855**		
V4. Provides training in entrepreneurial skills	**0.873**		
V5. Offers bursaries to the community	**0.790**		
V6. Contributes towards the reduction of crime in the community by offering employment	**0.851**		
V7. Develops its employees in terms of various skills	**0.680**		
V8. Pays tax	**0.375**		
V9. Makes monetary donations to local charitable organisations	**0.335**		
V10. Participates in influencing government policies for reducing poverty in the local community	**0.447**		
V11. Makes sponsorships in kind (such as providing equipment and goods or supplies) to the poor in the local community	**0.335**		
Questions:	**Factor loadings**		
EMPLOYMENT GENERATION	**1**	**2**	**3**
V12. Contributes to employment creation		**0.466**	
V13. Employs unqualified workers on a full-time basis		**0.487**	
V14. Employs unqualified part-time workers		**0.979**	
V15. Employs unskilled people		**0.863**	
V16. Employs qualified people		**0.671**	
V17. Employs casual workers		**0.860**	
V18. Has not retrenched employees since 2014		**0.523**	
Questions:	**Factor loadings**		
POVERTY REDUCTION	**1**	**2**	**3**
V19. Participates in construction projects in the community			**0.856**
V20. Contributes to educational projects in the community			**0.800**
V21. Contributes to health projects in the community			**0.855**
V22. Offers apprenticeships to members of the community			**0.707**
V23. Provides funding for environmental projects (such as waste reduction and recycling initiatives) in the local community			**0.799**

V24. Offers aid for insurance to employees			**0.526**
V25. Holds fundraising events to support poverty reduction in the community.			**0.856**
V26. Promotes other local small businesses by informing customers about their products			**0.799**
Cronbach's alpha	**0.903**	**0.883**	**0.800**

Table 4.15 indicates the Cronbach alpha values ranging from 0.8 to 0.903, which served as evidence that the questionnaire used to collect data was reliable and valid. Table 4.15 further shows that the items loaded has a loading of ≥ 0.30 for each factor component, which is an indication that the questions measure what they were supposed to measure.

Based on the factor loadings, the three factors have been named.

4.8.1.1 Economic development (Factor 1)

This factor was named after the following high factor-loading variables.

V1. It is my source of income
V2. Provides goods to the community
V3. Provides services to the community
V4. Provides training in entrepreneurial skills
V5. Offers bursaries to the community
V6. Contributes towards the reduction of crime in the community by offering employment
V7. Develops its employees in terms of various skills
V8. Pays tax
V9. Makes monetary donations to local charitable organisations
V10. Participates in influencing government policies for reducing poverty in the local community
V11. Makes sponsorships in kind (such as providing equipment and goods or supplies) to the poor in the local community

The results of the factor analysis show that the components of economic development are loaded as one factor as reflected in Table 4.15. The implication is that the components are highly correlated with factor 1, which indicates that they are measuring economic development. It is evident from Table 4.15 that source of income, provision of services, providing training, offering bursaries, and contributing towards the reduction of crime are highly loaded as compared to other

components. Hence, their influence on economic development is high. It is also evident from the table that each factor component loaded has a loading of ≥0.30, which implies that all the components of economic development are significant.

4.7.1.2 Employment generation (Factor 2)

This factor was named after the following high factor loading variables.

V12. Contributes to employment creation
V13. Employs unqualified workers on a full-time basis
V14. Employs unqualified part- time workers
V15. Employs unskilled people
V16. Employs qualified people.
V17. Employs casual workers
V18. Has not retrenched employees since 2014

Table 4.15 also indicates that the components of employment generation were loaded as one factor. These components are highly correlated, such that they adequately measure employment generation. It is evident from the table that variables such as employing unqualified part-time workers, employing unskilled workers and employing casual workers are highly loaded when compared to the other components. Hence, their influence on employment generation is high. It is also evident from the Table 4.15 that each factor component loaded has a loading of ≥0.30, meaning that all the components of employment generation are significant.

4.8.1.3 Poverty reduction (Factor 3)

This factor was named after the following high factor loading variables.

V19. Participates in construction projects in the community
V20. Contributes to educational projects in the community
V21. Contributes to health projects in the community
V22. Offers apprenticeships to members of the community
V23. Provides funding for environmental projects (such as waste reduction and recycling initiatives) in the local community
V24. Offers aid for insurance to employees
V25. Holds fundraising events to support poverty reduction in the community

V26. Promotes other local small businesses by informing customers about their products

Furthermore, Table 4.15 shows that during factor analysis, variables that measure poverty reduction were loaded as one factor. It is evident from the table that variables such as participating in construction projects, contributing to educational projects, contributing to health projects, and hold fundraising events to support poverty reduction, are highly loaded when compared to the other variables. This means that their influence on poverty reduction is high. However, all variables have significant influence on poverty reduction as they all have a loading of ≥0.30.

4.8.2 Cronbach's alpha test for reliability

Cronbach's alpha indicates the proportion of variance that is systematic or consistent in a set of test scores. It ranges from 0.00 to 1.00. The value of 0.00 implies that no variance is consistent and 1.00 implies that all variance is consistent. A Cronbach alpha's value of 0.90 implies that 90% of the data is reliable. In social sciences, the generally accepted Cronbach's alpha value is 0.70 and above (Nunnally & Bernstein, 1994). As indicated in Table 4.16, the Cronbach's alpha values for economic development, employment generation and poverty reduction are 0.903, 0.883 and 0.800 respectively. This means all the data is considered reliable.

4.7.3 Goodness of fit

Table 4.16 presents the KMO and Bartlett's test of the study.

Table 4.16: KMO and Bartlett's test

Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy		0.889
Bartlett's test of sphericity	Approx. chi-square	3011.668
	df	351
	Sig.	0.000

Kaiser–Meyer–Olkin (KMO) test is a measure of how well suited the research data are for factor analysis. The test measures sampling adequacy for each variable in the model and for the complete model. The lower the proportion, the more suited the data is for factor analysis. KMO returns values between 0 and 1 and values of less than 0.6 indicate that the sampling is not adequate and that remedial action should be taken. KMO values between 0.6 and 1 indicate that the sampling is

adequate whereas values close to zero mean that there are large partial correlations compared to the sum of correlations. In other words, there are widespread correlations, which are a large problem for factor analysis. This study obtained KMO value of 0.889, which is an indication that the sampling was adequate.

Goodness of fit test was conducted in this study by using Bartlett's test in order to determine whether the sample data represented the data the research expected to find in the actual population. As indicated in Table 4.16, the data collected yielded a chi-squared distribution ($\chi^2 = 3011.668$) with p-value = 0.000. Therefore, this research has a chi-squared distribution ($\chi^2 > 0$) and a p-value of 0.000 for an $\alpha = 0.05$ level of significance. This is a highly significant difference, which indicates that the sample data represented the data the research expected to find in the actual population.

4.9 INFERENTIAL STATISTICS

In order to determine whether a correlation exists between dependent variables, the study used the Pearson correlation test to determine the relationship between economic development, employment generation and poverty reduction.

4.9.1 The relationship between economic development, employment generation and poverty reduction

Although it is difficult to pinpoint the relationship between dependent variables, it is important to understand the relationship between these variables in order to determine whether the variables are correlated. According to Cohen (1988:75), the Pearson correlation test is a statistical method commonly used to determine whether a relationship exists between two or more variables. In this study, the Pearson correlation test was computed for economic development, employment generation and poverty reduction in order to determine the extent to which these variables relate to each other. With this knowledge, it can easily be deduced that if SMMEs influence one dependent variable, it is more likely that the SMMEs can also influence the other dependent variables, which have a strong relationship with the first variable.

Table 4.17 presents the results of the Pearson correlation test between economic development, employment generation and poverty reduction.

Table 4.17: The relationship between economic development, employment generation and poverty reduction

3 Variables:	Poverty reduction	Economic development	Employment generation

Pearson correlation coefficients, N = 182 Prob > |r| under H0: Rho=0				
Variables	**Poverty reduction**	**Employment generation**	**Economic development**	**Employment generation**
Poverty reduction	1.00000	0.39534 <.0001	0.64349 <.0001	0.40942 <.0001
Economic development	0.64349 <.0001	0.33884 <.0001	1.00000	0.48579 <.0001
Employment generation	0.40942 <.0001	0.47256 <.0001	0.48579 <.0001	1.00000

In Table 4.17, the Pearson correlation between each dependent variable of the study is presented. The scale for the Pearson correlation value is between negative one (-1) and one (+1). The value of –1 indicates a perfect negative linear correlation, which implies that as one variable increases, the other variable decreases in a consistent linear manner. The value of +1 indicates a perfect positive correlation, which implies that as one variable increases, the other variable increases in a consistent linear manner. Furthermore, Table 4.17 shows that all variables positively correlate with each other. However, the extent to which they correlate positively differ for each pair. Economic development is slightly positively correlated with employment generation (0.48579) and highly positively correlated with poverty reduction (0.64349). This implies that if SMMEs of Rustenburg contribute to economic development, they are more likely to contribute to poverty reduction and employment generation. There is a slight positive relationship between employment generation and poverty reduction (0.40942), which implies that if SMMEs contribute to employment generation, they are likely to contribute to poverty reduction. Therefore, it can be deduced that economic development, employment generation and poverty reduction are variables which correlate with each other, hence they are linked. This implies that as SMMEs in Rustenburg contribute to economic development, they automatically contribute to employment generation and

poverty reduction in the area. However, the extent of their contribution is higher in poverty reduction than in employment generation.

Although there is a correlation between economic development, employment generation and poverty reduction, this does not mean that there is causality between these variables. Statistical correlation constitutes only one condition for developing causal models (Nemaenzhe, 2010:194). Therefore, there is a need for further research to explore the actual causal relationship of economic development, employment generation and poverty reduction from the perspective of SMMEs. This causal relationship was beyond the scope of this particular study.

4.10 ANALYSIS OF VARIANCE

The analysis of variance (ANOVA) is a statistical technique that determines significant differences in scale-level dependent variables by nominal-level variable, which has two or more categories. Basically, ANOVA tests groups in order to determine whether there is a difference between them or not (Levine & Berenson, 2015:189). In this study, the dependent variables were continuous, namely, economic development, employment generation and poverty reduction. The independent variable, which is SMMEs, was grouped into six categories, namely agriculture, construction, manufacturing, mining services, and wholesale and retail.

4.10.1 ANOVA on SMME sectors and economic development

The general linear model (GLM) was used to compute the ANOVA on SMME sectors and economic development with the intention of determining which of the SMME sectors contribute more to economic development compared to other SMME sectors. GLM was also used to compute R-squared values, which were used to determine the strength of the variance (difference) among SMME sectors in terms of their contribution to economic development. The findings related to the main investigation of the study, which determined the extent to which SMMEs contribute to economic development in Rustenburg. Table 4.18 and Figure 4.1 represent the ANOVA for SMME sectors and economic development.

Table 4.18: ANOVA on SMME sectors and economic development

Source	R-square	F value	Pr > F
Model	0.182400	7.85	< 0.0001

Table 4.18 indicates the p-value of less than 0.05 (significant level), showing that there are differences in SMME sectors with regard to their contribution to economic development. An R-square value of 0.182 indicates that the extent of the differences (variance) is 18%.

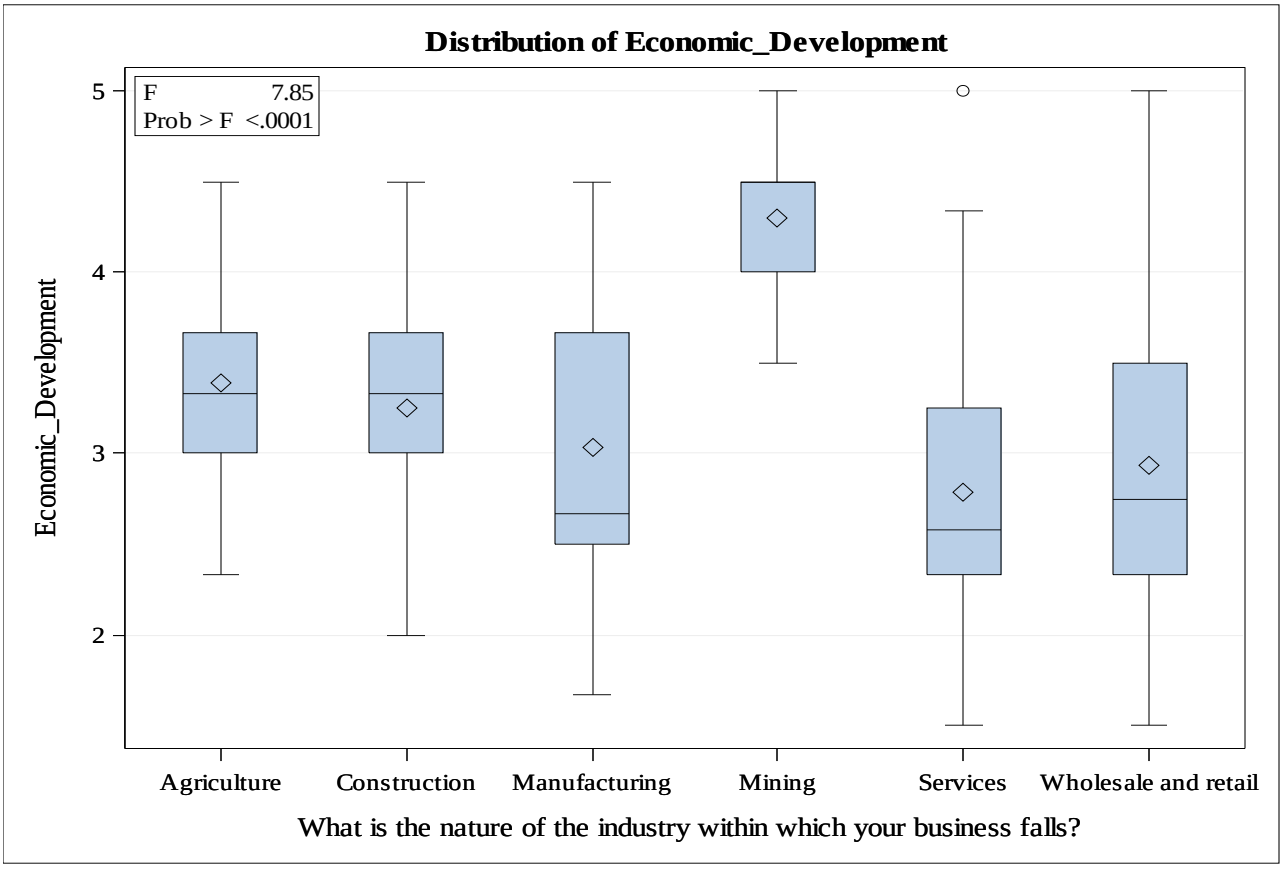

Figure 4.1: Distribution of economic development in SMME sectors

Figure 4.1 presents multiple comparison test results, which compare the mean values between the SMME sectors. It is evident that the mining sector has the highest mean in terms of its contribution to economic development, followed by the agriculture sector. The services sector is indicated as having the lowest mean score, meaning that the contribution of this sector to economic development is very small. These findings imply that SMMEs in the mining sector contribute more

to economic development than the SMMEs in the other sectors, with the lowest in the services sector. The findings also reveal that SMMEs explain 18% of the variance of economic development and the remaining 82% can be attributed to the factors that were beyond the scope of this study.

4.10.2 ANOVA on SMME sectors and employment generation

GLM was used to compute the ANOVA of SMME sectors and employment generation with the intention of finding out which of the SMME sectors generate more employment compared to other SMME sectors. GLM was also used to compute R-squared values, which were then used to determine the strength of the variance (difference) among SMME sectors in terms of their contribution to employment generation. The findings relate to the secondary objective, which aimed at determining the extent to which SMMEs contribute to employment generation in Rustenburg.

Table 4.19 and Figure 4.2 represent the ANOVA on SMME sectors and employment generation.

Table 4.19: ANOVA on SMME sectors and employment generation

Source	R-square	F value	Pr > F
Model	0.145505	5.99	<0.0001

The p-value indicated in Table 4.19 is less than 0.05 (significant level). This means that there are differences in SMME sectors with regard to their contribution to employment generation. The R-square value of 0.145 infers that the extent of the differences (variance) is 15%. These results are complimented by the multiple comparison tests.

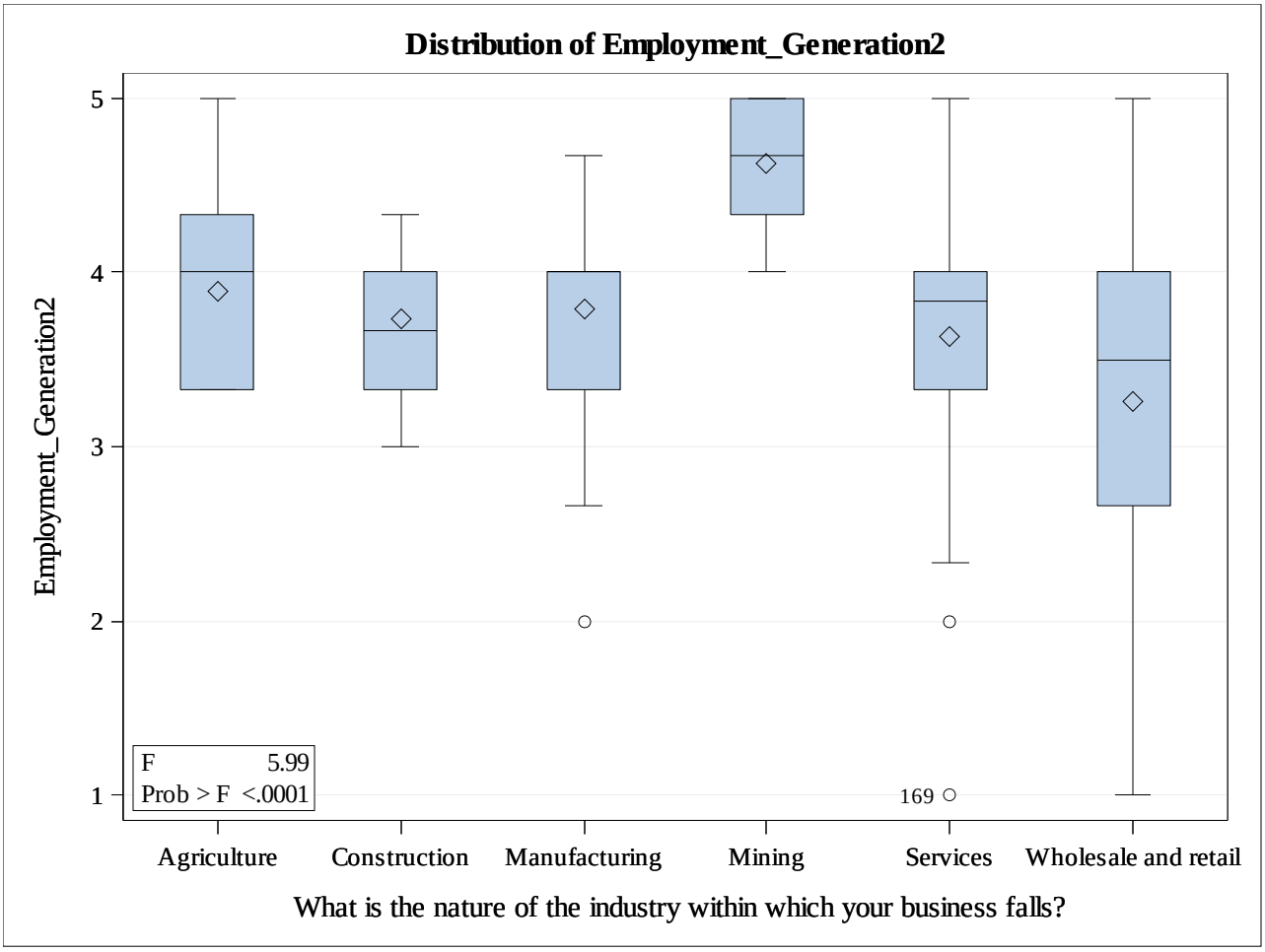

Figure 4.2 Distribution of employment generation in SMME sectors

Figure 4.2 presents multiple comparison test results, which compare the mean values between the SMME sectors. It is evident from Figure 4.2 that the mining sector has the highest mean on employment generation followed by the agriculture sector. The services sector is indicated as having the lowest mean score, meaning that the contribution of this sector to employment generation in Rustenburg is very small. These findings reveal that SMMEs in the mining sector contribute more to employment generation than the SMMEs in the other sectors. The findings also reveal that SMMEs explain 15% of the variance of employment generation and the remaining 85% can be attributed to the factors that were beyond the scope of this study.

4.10.3 ANOVA on SMME sectors and poverty reduction

GLM was used to compute the ANOVA for SMME sectors and poverty reduction with the intention of determining which of the SMME sectors contribute more to poverty reduction compared to other SMME sectors. GLM was also used to compute the R-squared values, which were then used to determine the strength of the variance (difference) among SMME sectors in terms of their contribution to poverty reduction. The findings relate to the secondary objective, which aimed at determining the extent to which SMMEs contribute to poverty reduction in Rustenburg.

Table 4.20 and Figure 4.3 represent the ANOVA on SMME sectors and employment generation.

Table 4.20: ANOVA on SMME sectors and poverty reduction

Source	R-square	F value	Pr > F
Model	0.267290	12.84	<0.0001

Table 4.20 shows a p-value of less than 0.05 (significant level), suggesting that there are differences in SMME sectors with regard to their contribution to poverty reduction. The R-square value is 0.267, implying that the extent of the differences (variance) is 27%.

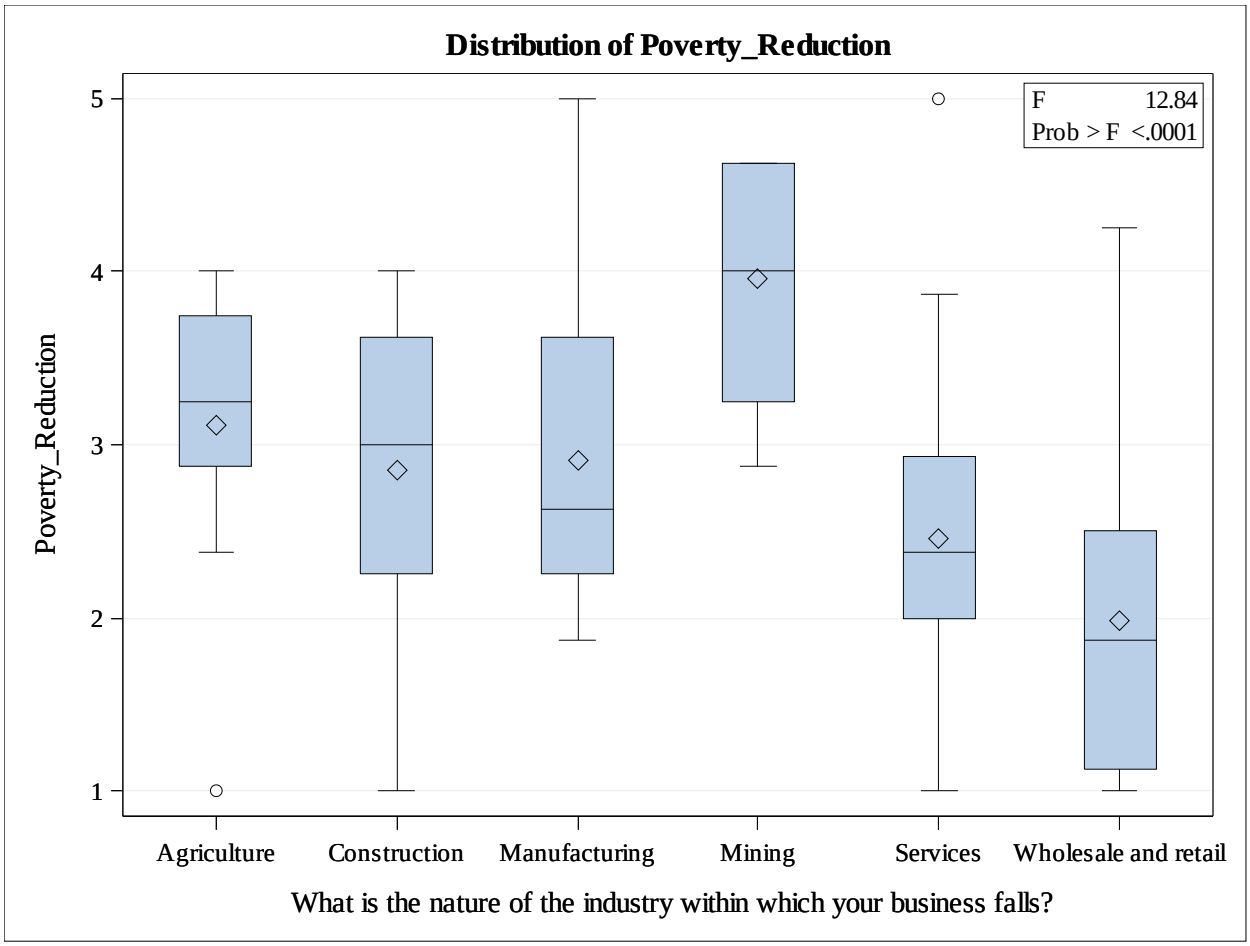

Figure 4.3 Distribution of poverty reduction in SMME sectors

These results in Table 4.20 are also complemented by the multiple comparison test reflected in Figure 4.3, which compares the mean values between the SMME sectors. It is evident from the figure that services, and wholesale and retail sectors have the lowest mean scores, meaning that the contribution of these sectors to poverty reduction in Rustenburg is minimal compared to other SMME sectors.

These findings indicate that SMMEs in the mining, manufacturing, construction, and agriculture sectors contribute more to poverty reduction than the SMMEs in the other sectors. The findings also reveal that SMMEs explain 27% of the variance of poverty reduction and the remaining 73% can be attributed to the factors that did not form part of this study.

4.11 THE TUKEY'S STUDENTISED RANGE TEST/HONEST SIGNIFICANT DIFFERENCE (HSD) TEST

Although ANOVA was used to test the variance (difference) between SMME sectors in terms of their contribution to economic development, employment generation and poverty reduction, its results only indicated the overall significance. They did not indicate where exactly the variances lie. In order to determine which specific SMME sector mean scores (compared with each other) were significantly different, the Tukey's studentised range (HSD) test was computed. It compared all pairs of mean scores of SMME sectors in terms of their contribution to economic development, employment generation and poverty reduction.

4.11.1 The Tukey's studentised range (HSD) test on SMME contribution to economic development

Table 4.21 compares the mean scores of each SMME sector in terms of their contribution to economic development. Where the three asterisks are indicated, it implies that the means for the groups listed differ significantly. The findings relate to the main investigation of the study, which determines the extent to which SMMEs contribute to economic development in Rustenburg.

Table 4.21: The Tukey's studentised range (HSD) test on SMME contribution to economic development

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Mining – Agriculture	0.9117	0.0059	1.8175	***
Mining – Construction	1.0427	0.2214	1.8640	***
Mining – Manufacturing	1.2630	0.4823	2.0437	***
Mining – Wholesale and retail	1.3630	0.6066	2.1193	***
Mining – Services	1.5078	0.7537	2.2620	***
Agriculture – Mining	-0.9117	-1.8175	-0.0059	***
Agriculture – Construction	0.1310	-0.5938	0.8558	
Agriculture – Manufacturing	0.3513	-0.3272	1.0297	
Agriculture – Wholesale and retail	0.4513	-0.1990	1.1016	
Agriculture – Services	0.5962	-0.0516	1.2439	

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Construction – Mining	-1.0427	-1.8640	-0.2214	***
Construction – Agriculture	-0.1310	-0.8558	0.5938	
Construction – Manufacturing	0.2203	-0.3404	0.7810	
Construction – Wholesale and retail	0.3203	-0.2060	0.8466	
Construction – Services	0.4652	-0.0579	0.9882	
Manufacturing – Mining	-1.2630	-2.0437	-0.4823	***
Manufacturing – Agriculture	-0.3513	-1.0297	0.3272	
Manufacturing – Construction	-0.2203	-0.7810	0.3404	
Manufacturing – Wholesale and retail	0.1000	-0.3604	0.5604	
Manufacturing – Services	0.2449	-0.2118	0.7016	
Wholesale and retail – Mining	-1.3630	-2.1193	-0.6066	***
Wholesale and retail – Agriculture	-0.4513	-1.1016	0.1990	
Wholesale and retail – Construction	-0.3203	-0.8466	0.2060	
Wholesale and retail – Manufacturing	-0.1000	-0.5604	0.3604	
Wholesale and retail – Services	0.1449	-0.2689	0.5586	
Services – Mining	-1.5078	-2.2620	-0.7537	***
Services – Agriculture	-0.5962	-1.2439	0.0516	
Services – Construction	-0.4652	-0.9882	0.0579	
Services – Manufacturing	-0.2449	-0.7016	0.2118	
Services – Wholesale and retail	-0.1449	-0.5586	0.2689	

According to Table 4.21, the mean score of SMMEs in mining differs significantly from the mean scores of SMMEs in agriculture, construction, manufacturing, wholesale and retail, and services. However, the extent of their difference varies, with the highest in the services sector (1.5078), followed by wholesale and retail (1.3630) and manufacturing (1.2630).

Table 4.21 depicts that the mean score of SMMEs in mining differs significantly from SMMEs of the other listed sectors. This is evidence that there are significant differences in the contribution of SMME sectors to economic development, with the mining sector being the highest. These findings

suggest that the effect of SMMEs in mining in terms of their contribution to economic development is significantly greater than the effect of the other listed SMME sectors.

4.11.2 The Tukey's studentised range test on SMMEs contribution to employment generation

Table 4.22 compares the mean scores of each SMME sector if they differ significantly in terms of their contribution to employment generation. Where the three asterisks are indicated, it implies that the means for the groups listed differ significantly. The findings relate to the secondary objective, which aimed at determining the extent to which SMMEs contribute to employment generation in Rustenburg.

Table 4.22 The Tukey's studentised range test on SMMEs contribution to employment generation

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Mining – Agriculture	0.7322	–0.2338	1.6982	
Mining – Manufacturing	0.8392	0.0066	1.6717	***
Mining – Construction	0.8905	0.0146	1.7664	***
Mining – Services	0.9950	0.1907	1.7993	***
Mining – Wholesale and retail	1.3696	0.5630	2.1763	***
Agriculture – Mining	-0.7322	-1.6982	0.2338	
Agriculture – Manufacturing	0.1070	-0.6166	0.8305	
Agriculture – Construction	0.1583	-0.6147	0.9313	
Agriculture – Services	0.2628	-0.4280	0.9536	
Agriculture – Wholesale and retail	0.6374	-0.0561	1.3310	
Manufacturing – Mining	-0.8392	-1.6717	-0.0066	***
Manufacturing – Agriculture	-0.1070	-0.8305	0.6166	
Manufacturing – Construction	0.0513	-0.5466	0.6493	
Manufacturing – Services	0.1559	-0.3312	0.6429	
Manufacturing – Wholesale and retail	0.5305	0.0395	1.0214	***
Construction – Mining	-0.8905	-1.7664	-0.0146	***
Construction – Agriculture	-0.1583	-0.9313	0.6147	

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Construction – Manufacturing	-0.0513	-0.6493	0.5466	
Construction – Services	0.1045	-0.4533	0.6624	
Construction – Wholesale and retail	0.4791	-0.0821	1.0404	
Services – Mining	-0.9950	-1.7993	-0.1907	***
Services – Agriculture	-0.2628	-0.9536	0.4280	
Services – Manufacturing	-0.1559	-0.6429	0.3312	
Services – Construction	-0.1045	-0.6624	0.4533	
Services – Wholesale and retail	0.3746	-0.0666	0.8159	
Wholesale and retail – Mining	-1.3696	-2.1763	-0.5630	***
Wholesale and retail – Agriculture	-0.6374	-1.3310	0.0561	
Wholesale and retail – Manufacturing	-0.5305	-1.0214	-0.0395	***
Wholesale and retail – Construction	-0.4791	-1.0404	0.0821	
Wholesale and retail – Services	-0.3746	-0.8159	0.0666	

Table 4.22 indicates that the mean score of SMMEs in mining has a significant difference with the mean scores of SMMEs in the sectors of manufacturing (0.8392), construction (0.8905), services (0.9950), and wholesale and retail (1.3696). However, there is no significant difference between the mean score of mining SMMEs and the mean score of agriculture SMMEs. Table 4.22 further shows a significant difference between the mean score of manufacturing SMMEs and the mean score of SMMEs in wholesale and retail sector (0.5305).

In summary, Table 4.22 shows that the mean score of SMMEs in mining differs significantly from the mean scores of most listed SMME sectors. Therefore, there are significant differences in the contribution of SMME sectors to employment generation with the mining sector being the highest, followed by wholesale and retail sector. As a result, these findings imply that the effect of SMMEs in mining in terms of their contribution to employment generation is significantly greater than the effect of the other listed SMME sectors.

4.11.3 The Tukey's studentised range test on SMMEs contribution to poverty reduction

Table 4.23 compares the means scores of each SMME sector if they differ significantly in terms of their contribution to poverty reduction. Where the three asterisks are indicated, it shows that the means for the groups listed differ significantly. The findings relate to the secondary objective, which aimed at determining the extent to which SMMEs contribute to poverty reduction in Rustenburg.

Table 4.23 The Tukey's studentised range test on SMMEs contribution to poverty reduction

Comparisons significant at the 0.05 level are indicated by *.**				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Mining – Agriculture	0.8429	-0.2019	1.8878	
Mining – Manufacturing	1.0512	0.1507	1.9517	***
Mining – Construction	1.0996	0.1523	2.0470	***
Mining – Services	1.4944	0.6245	2.3643	***
Mining – Wholesale and retail	1.9758	1.1034	2.8483	***
Agriculture – Mining	-0.8429	-1.8878	0.2019	
Agriculture – Manufacturing	0.2082	-0.5744	0.9909	
Agriculture – Construction	0.2567	-0.5794	1.0928	
Agriculture – Services	0.6514	-0.0957	1.3986	
Agriculture – Wholesale and retail	1.1329	0.3827	1.8830	***
Manufacturing – Mining	-1.0512	-1.9517	-0.1507	***
Manufacturing – Agriculture	-0.2082	-0.9909	0.5744	
Manufacturing – Construction	0.0484	-0.5983	0.6952	
Manufacturing – Services	0.4432	-0.0836	0.9700	
Manufacturing – Wholesale and retail	0.9246	0.3936	1.4557	***
Construction – Mining	-1.0996	-2.0470	-0.1523	***
Construction – Agriculture	-0.2567	-1.0928	0.5794	
Construction – Manufacturing	-0.0484	-0.6952	0.5983	
Construction – Services	0.3948	-0.2086	0.9981	
Construction – Wholesale and retail	0.8762	0.2691	1.4833	***
Services – Mining	-1.4944	-2.3643	-0.6245	***

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Services – Agriculture	-0.6514	-1.3986	0.0957	
Services – Manufacturing	-0.4432	-0.9700	0.0836	
Services – Construction	-0.3948	-0.9981	0.2086	
Services – Wholesale and retail	0.4814	0.0042	0.9587	***
Wholesale and retail – Mining	-1.9758	-2.8483	-1.1034	***
Wholesale and retail – Agriculture	-1.1329	-1.8830	-0.3827	***
Wholesale and retail – Manufacturing	-0.9246	-1.4557	-0.3936	***
Wholesale and retail – Construction	-0.8762	-1.4833	-0.2691	***
Wholesale and retail – Services	-0.4814	-0.9587	-0.0042	***

As shown in the results in Table 4.23, the mean scores of SMMEs in manufacturing (1.0512), construction (1.0996), services (1.4944), wholesale and retail (1.9758) are significantly different from the mean score of SMMEs in the mining sector. Table 4.23 also indicates significant differences between the mean score of the wholesale and retail sector with the mean scores of SMMEs in the sectors of agriculture (1.1329), manufacturing (0.9246), construction (0.8762), and services (0.4814).

In summary, Table 4.23 shows that the mean scores of SMMEs in mining, wholesale and retail differ significantly with mean scores of SMMEs of the other listed sectors. This significant difference means that the SMMEs in the mining, and wholesale and retail sectors contribute more to poverty reduction than other listed SMME sectors. Therefore, these findings suggest that the effect of SMMEs in mining, wholesale and retail in terms of their contribution to poverty reduction is significantly greater than the effect of the other listed SMME sectors.

4.12 DISCUSSION

This chapter presented the empirical findings of the study of the role of SMMEs in the economic development of Rustenburg, South Africa. Cronbach's alpha values of above 0.8 were obtained for the reliability test, showing that the questionnaire used was reliable as the data collecting instrument. The chapter also presented data on demographic variables, namely age group, gender and educational levels. The empirical findings on demographic variables were presented using

frequencies and percentages. Empirical findings on the profile of SMMEs were also presented using frequencies and percentages. The profile of the variables of SMMEs on which data were collected included the types of ownership, the nature of the industry in which SMMEs operate, whether SMMEs operate part-time or full-time, employment trends of SMMEs, turnover, and current asset values and the duration in which the SMMEs have been in operation. The results indicated that the majority of respondents in this study are registered private companies that offer services to the communities around Rustenburg. Most of these SMMEs operate on a full-time basis, employ between 1 and 5 employees and have an average annual turnover and current asset value of more than R2 million each. The study also revealed that most SMMEs close within five years after their establishment.

Empirical findings on SMME owners' perceptions of the role of SMMEs in economic development, employment generation and poverty reduction were presented using percentages and descriptive statistics. The results revealed that SMMEs play several roles in the economic development of Rustenburg through a number of activities, which include providing income, goods and services to the communities, embarking on various training and development programs as well as paying tax. SMMEs also create employment of different kinds, which include full-time and part-time workers, qualified and unskilled workers, as well as casual workers. The results further revealed that most SMMEs are not involved directly in reducing poverty. However, these businesses also indirectly contribute to the provision of public goods and services by paying tax.

The chapter also presented the findings regarding significant differences in respondents' perceptions of the roles of SMMEs in economic development, employment generation and poverty reduction. The data were analysed using ANOVA. The results revealed that there are differences in SMME sectors with regard to their contribution to economic development, employment generation and poverty reduction. The results also revealed that SMMEs in the mining sector have the greatest influence on economic development, employment generation and poverty reduction in Rustenburg.

The Pearson correlation test for economic development, employment generation and poverty reduction was also computed in order to determine the extent to which these variables relate to each other. The findings revealed that there is a positive relationship between economic development, employment generation and poverty reduction. These results suggest that as SMMEs

contribute to economic development, they also contribute to employment generation and poverty reduction.

The chapter also presented the results of Tukey's studentised range test, which measured significant differences between SMME sectors. Results revealed that SMMEs in mining differ significantly from SMMEs in agriculture, manufacturing, construction, services, and wholesale and retail. These findings reveal that the effect of SMMEs in mining in terms of their contribution to economic development, employment generation and poverty reduction is significantly greater than the effect of the other listed SMME sectors.

4.13 CONCLUSION

Empirical findings revealed that SMMEs play a significant role in contributing to the economic development, employment generation and poverty reduction of Rustenburg, with SMMEs in the mining sector having a greater and more significant contribution than other sectors. The findings also indicated a positive relationship between economic development, employment generation and poverty reduction.

Chapter 5 focuses on the summary, conclusions and recommendations of the study. It also presents the achievement of the objectives, contribution and limitations of the study as well as areas for further study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

Chapter 4 analysed the data to answer the research objectives. Chapter 5 summarises the study that was undertaken to explain the role of SMMEs in the economic development of Rustenburg in South Africa. This chapter is divided into eight sections. Section 5.2 provides a theoretical summary of the study. Section 5.3 revisits the research objectives. Section 5.4 presents the summary and conclusions of the empirical findings based on the research objectives. Recommendations of this study are presented in section 5.5. Section 5.6 presents the contribution to the body of knowledge made by this study. The limitations of the study are presented in section 5.7. Section 5.8 presents areas for further research and section 5.9 concludes the study.

5.2 THEORETICAL SUMMARY OF THE STUDY

The first chapter provided an introduction to the study and the background to the problem that necessitated the study. It also provided the research objectives and questions of the study. Further discussed, were the problem statement, significance of the study, delimitations and limitations of the study, assumptions, and the key terms of the study.

The second chapter presented the role of SMMEs in economic development, the background and nature of SMMEs, and the concepts of economic development, unemployment and poverty were analysed and discussed. The measurements of economic development, unemployment and poverty were also articulated.

The third chapter outlined the research methodology adopted in the study, focusing on the research design, research approach, population, and sampling approach. Also discussed were the data collection instruments, data analysis methods, sources of data, validity, reliability, and ethical considerations of the study.

The fourth chapter presented the data gathered from the empirical part of the research study, analysis and discussion of findings in view of the research objectives. Further discussed were the statistical tools used to analyse the data such as the Pearson correlation test, analysis of variance (ANOVA) and Tukey's honest significant difference (HSD) test. Data were presented and explained in the form of tables and figures.

The fifth chapter summarises and concludes the study and makes recommendations based on the research objectives. Recommendations for further studies are also made in this chapter.

5.3 RESEARCH OBJECTIVES REVISITED

The primary objective for undertaking this study was to investigate the role of SMMEs in the economic development of Rustenburg in South Africa.

The following secondary objectives were formulated to support the primary objective and guide the study:

- to determine the activities of SMMEs in the Rustenburg Local Municipality;
- to determine the extent to which SMMEs contribute to employment generation in the Rustenburg Local Municipality; and
- to identify the extent to which SMMEs contribute to poverty reduction in the Rustenburg Local Municipality.

5.4 SUMMARY OF EMPIRICAL FINDINGS

Objective 1: To determine the activities of SMMEs in the Rustenburg Local Municipality

Findings indicated that SMMEs play a role in the economic development of Rustenburg through a number of activities, which include providing income, goods and services to the communities and embarking on various training and development programmes. The findings further showed that SMMEs in the mining sector contribute more to economic development than the SMMEs in the other sectors.

The study concluded that although SMMEs perform a critical role in contributing to economic development of the country, SMMEs in the mining sector have a greater impact on the contribution of SMMEs to economic development.

Objective 2: To determine the extent to which SMMEs contribute to employment generation in the Rustenburg Local Municipality

The results revealed that SMMEs create employment for different kinds for workers, which include full-time and part-time workers, unskilled workers, as well as casual workers. Similarly, the findings also showed that SMMEs in the mining sector contribute more to employment generation than the SMMEs in the other sectors. The study concluded that although SMMEs create

different types of employment for South Africans, more jobs are created by SMMEs in the mining sector than in the other sectors.

Objective 3: To identify the extent to which SMMEs contribute to poverty reduction in the Rustenburg Local Municipality

The study established that most SMMEs are not directly involved in reducing poverty. However, they indirectly reduce poverty by paying tax. It was further shown that SMMEs in the mining, manufacturing, construction, and agriculture sectors contribute more to poverty reduction than the SMMEs in the other sectors.

The conclusion drawn from this study was that SMMEs play an indirect role in poverty reduction. Therefore, most SMMEs do not directly reduce poverty, but indirectly play a role in poverty reduction by paying tax. Furthermore, SMMEs in mining, manufacturing, construction, and agriculture pay more tax than other SMMEs. Hence, their contribution to poverty reduction is significantly greater.

5.5 RECOMMENDATIONS OF THE STUDY

Based on the findings of the study, the following recommendations, if implemented, may enhance the operations of SMMEs in Rustenburg further to contribute to economic development, employment generation and poverty reduction.

Firstly, the study showed that SMMEs in the mining sector contribute more to economic development of Rustenburg than other SMMEs. Therefore, it is suggested that the government should consider increasing the development programmes for SMMEs that operate in Rustenburg. This will increase the levels of entrepreneurial activities in the area, resulting in the increase in the level of economic development in Rustenburg and the country at large.

Secondly, government support of SMMEs seems to be inadequate as the level of unemployment and poverty are still escalating in South Africa despite the implementation of supporting mechanisms by the government for SMMEs. Therefore, the government needs to increase its support for SMMEs of Rustenburg in such a way that it improves the effectiveness and efficiency of SMMEs resulting in enhancing their ability to create more jobs and reduce poverty in this area. This support may include government investment in the technology of SMMEs, providing practical SMME development programmes and ensuring sufficient funding for SMMEs.

Furthermore, SMMEs support must be integrated into the development and poverty reduction strategies of Rustenburg Local Municipality. In addition, it is imperative that SMME owners are trained in innovation and creativity in order to improve the contribution SMMEs to the economic development of Rustenburg.

Thirdly, the environment in which SMMEs operate is highly regulated, causing SMMEs to face constraints that hinder their growth and survival. Therefore, the regulatory framework that governs the SMME sector has to be reviewed and improved in order to increase the level of entrepreneurial activities of SMMEs, and hence, increasing economic development of Rustenburg in particular, and South Africa at large.

5.6 CONTRIBUTION OF THE STUDY TO THE BODY OF KNOWLEDGE

The study contributes to the body of knowledge in the field of entrepreneurship. The empirical results of the study provided new insights into the role of SMMEs in economic development. The findings revealed that SMMEs do not only contribute to economic development through employment creation and poverty reduction as found in previous studies. They also contribute to the economic development by embarking on the social aspects of economic development, which were ignored by previous studies, such as education, health care, donations, providing training, and sponsorship. Therefore, this study facilitated the synthesis of existing studies and helped to address the gaps in the existing literature.

The study also empirically proved that there is a significant correlation between economic development, employment generation and poverty reduction. This implies that as SMMEs contribute to economic development, they automatically contribute to employment generation and poverty reduction. Therefore, SMMEs that focus on contributing to economic development are more likely to contribute to employment generation and poverty reduction. These findings create awareness with practising and emerging entrepreneurs, government and other stakeholders in terms of the critical socio-economic roles that SMMEs play in the country, as well as the extent of their contribution to economic development. As a result, these findings may promote entrepreneurial activities in the country, as well as motivate government to review the policies pertaining to the SMME sector.

5.7 LIMITATIONS OF THE STUDY

The study had some limitations. The study was limited to SMMEs registered in the SMME database of Rustenburg Local Municipality. Therefore, the results may not be generalised to other regions with different structural make-up of SMMEs. However, Rustenburg Local Municipality is the most populous municipality in the Bojanala District, which makes the findings of the study more valid. Another limitation was that the given responses were not verified and thus, they remain perceptions.

In addition, some of the respondents were unwilling to complete the questionnaires out of fear that their confidential information might be leaked to their competitors. To address this limitation, the researcher provided verbal and written assurance that the study was for academic purposes only and that it would be treated with confidentiality.

5.8 AREAS FOR FURTHER STUDY

This study has provided insights into the role of SMMEs in economic development of Rustenburg. However, the findings have revealed areas that need further research. The following areas are recommended for further research.

This study excluded survivalists and foreign-owned SMMEs. Therefore, separate studies could be conducted on survivalists and foreign-owned SMMEs in order to determine the extent to which these businesses contribute to economic development.

Findings also revealed that SMMEs only explained 18% of the variance of economic development and the remaining 82% was attributed to the factors that were beyond the scope of this study. Further research is needed to explore the other factors that affect economic development from the perspectives of SMMEs.

5.9 CONCLUSION

Chapter 5 provided both the theoretical and empirical summaries of the study on the role of SMMEs in the economic development of Rustenburg in South Africa. Conclusions were given in respect of each research objective. The researcher provided some recommendations, contribution to the body of knowledge and limitations of the study. Directions for future research were also provided.

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APPENDICES

APPENDIX A: QUESTIONNAIRE USED FOR DATA COLLECTION FROM SMME OWNERS

CONSENT TO PARTICIPATE IN THE STUDY
Department of Entrepreneurship, Supply Chain, Transport, Tourism and Logistics Management (DESTTL)

Title of the Study: The Role of Small and Medium Enterprises (SMMEs) in the Economic Development of Rustenburg, South Africa

Research conducted by: Mr Samuel Chiromo

Dear prospective participant,

You are hereby invited to participate in a survey conducted by Samuel John Chiromo as part of his Masters' Degree Programme at the University of South Africa, under the supervision of Dr G. V. Nani.

The questionnaire you have received aims to investigate the role that small and medium enterprises (SMMEs) play in the economic development of Rustenburg. You were selected to participate in this survey because you form part of the SMME owners operating within the communities of Rustenburg, and whose businesses are registered in the database of the Rustenburg Local Municipality.

By completing this questionnaire, you agree that the information you provide may be used for research purposes, including dissemination through peer-reviewed publications and conference proceedings. It is anticipated that the information obtained from this questionnaire will help the researcher to better understand the role that small and medium enterprises (SMMEs) play in the economic development of Rustenburg. You are, however, under no obligation to complete the questionnaire and you can withdraw from the study prior to submitting the questionnaire. The

questionnaire has been designed to be anonymous, which means that there is no way of connecting the information that you provide to you personally.
If you choose to participate in this survey, it will take no more than 30 minutes of your time. You will not be reimbursed or receive any incentives for your participation in the survey. You will not benefit from your participation as an individual, but it is envisaged that the findings of this study will contribute towards the body of knowledge on the role of small and medium enterprises (SMMEs) in economic development.

The researcher undertakes to keep any information provided herein confidential, and to report on the findings from the perspective of the participating group, and not from the perspective of an individual.

The records will be kept for five years for audit purposes, after which time they will be permanently destroyed. Hard copies will be shredded and electronic versions will be permanently deleted from the hard drive of the device on which the information is stored.

The research was reviewed and approved by the UNISA Department of Entrepreneurship Ethics Review Committee. The primary researcher, Samuel Chiromo, can be contacted during office hours on 0798790265/012 429 6196 or at echirosj@unisa.ac.za. The study leader, Dr G. V. Nani, can be contacted at gweni.nani@gmail.com .

You are making a decision whether or not to participate by continuing to the next page. You are, however, free to withdraw from the study at any time.

Should you have any concerns about the way in which the research has been conducted, you may contact Dr G. V. Nani at the e-mail address provided.

Thank you for taking time to read this information sheet and for participating in this study.

CONSENT TO PARTICIPATE IN THE STUDY

I, _____ (participant name) confirm that the person requesting my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of such participation.

I have read and understood all the details about the study, which were explained to me.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be incorporated into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

Participant Name & Surname…… (please print)

Participant Signature……..Date……

Researcher's Name & Surname……(please print)

Researcher's signature……..Date……

Appendix B: Questionnaire for the study

SECTION 1: Demographic characteristics of the respondents

Please tick the options that best represent your demographics.

1.1. What is your age group?

Below 30 years	1
30-40 years	2
41-50 years	3
Above 50 years	4

1.2.What is your gender?

Male	1
Female	2

1.3.What is your highest level of education?

Degree	1
Diploma	2
Grade 8-12	3
Grade 1-7	4
Other (specify)	5
No formal education	6

SECTION 2: Characteristics of the business

Please tick the options that best represent the characteristics of your business.

2.1.What is the type of ownership of your business?

Sole-owner	1
Partnership	2
Private company	3

2.2.What is the nature of the industry within which your business falls?

Construction	1
Manufacturing	2
Mining	3
Services	4
Agriculture	5
Wholesale and retail	6
Other (specify)	7

2.3. Is your business part-time or full-time?

Part-time	1
Full- time	2

2.4. How many people have been employed in your business for the past three years?

	2015	2016	2017
0	1	1	1
1-5	2	2	2
6-50	3	3	3
51-100	4	4	4
101-200	5	5	5
200+	6	6	6

2.5.What is the value of the sales of your business per year?

Less than R150 000	1
R150 001- R500 000	2
R500 001 – R1 million	3
R1 million – R2 million	4
R2+ million	5

2.6.What is the value of the current assets (such as stock, debtors etc., which are expected to be converted into cash within a year) in your business?

Less than R100 000	1
R100 001- R500 000	2
R500 001 – R1million	3
R1 million – R2 million	4
R2+ million	5

2.7. Please indicate the year in which you started your business.

The year in which my business was set up.	

SECTION 3: The role of small and medium enterprises (SMMEs) in the economic development of Rustenburg

This section uses a scale of 1 – 5, where 1- Strongly Disagree (SD), 2- Disagree (D), 3- Neutral (N), 4- Agree (A), and 5-Strongly Agree (SA).

Please indicate to what extent you agree or disagree with the statements in the table below:

My business:

Statement	**1.Strongly Disagree**	**2. Disagree**	**3.Neutral**	**4.Agree**	**5.Strongly Agree**
A. is my source of income.	1	2	3	4	5
B. provides goods to the community.	1	2	3	4	5
C. provides services to the community.	1	2	3	4	5
D. provides training in entrepreneurial skills(such as customer needs identification, risk- taking and management of small businesses) to the community.	1	2	3	4	5

E. offers bursaries to the community.	1	2	3	4	5
F. contributes towards the reduction of crime in the community by offering employment.	1	2	3	4	5
G. develops its employees in terms of various skills.	1	2	3	4	5
H. pays tax	1	2	3	4	5
I. makes monetary donations to local charitable organisations.	1	2	3	4	5
J. participates in influencing government policies for reducing poverty in the local community.	1	2	3	4	5
K. makes sponsorships in kind (such as providing equipment and goods or supplies) to the poor in the local community.	1	2	3	4	5

SECTION 4: The role of SMMEs in employment generation in Rustenburg

This section uses a scale of 1 - 5 where 1- Strongly Disagree (SD), 2- Disagree (D), 3- Neutral (N), 4- Agree (A), 5-Strongly Agree (SA).

Please indicate to what extent you agree or disagree with the statements in the table below.

My business:

Statement	**1.Strongly Disagree**	**2. Disagree**	**3.Neutral**	**4.Agree**	**5.Strongly Agree**
A. contributes to employment creation.	1	2	3	4	5
B. employs unqualified workers on a full-time basis.	1	2	3	4	5
C. employs unqualified part-time workers.	1	2	3	4	5
D. sometimes employs unskilled people.	1	2	3	4	5
E. also employs qualified people.	1	2	3	4	5

F.	employs casual workers.	1	2	3	4	5
G.	has not retrenched employees since 2014.	1	2	3	4	5
H.	also provides employment to my family member/s.	1	2	3	4	5

SECTION 5: The role of SMMEs in poverty reduction in Rustenburg

On a scale of 1 - 5 where 1- Strongly Disagree (SD), 2- Disagree (D), 3- Neutral (N), 4- Agree (A), 5-Strongly Agree (SA).

Please indicate to what extent you agree or disagree with the statements in the table below:

My business:

Statements	**1.Strongly Disagree**	**2. Disagree**	**3.Neutral**	**4.Agree**	**5.Strongly Agree**
A. participates in construction projects in the community.	1	2	3	4	5
B. contributes to educational projects in the community.	1	2	3	4	5
C. contributes to health projects in the community.	1	2	3	4	5
D. offers apprenticeships to members of the community.	1	2	3	4	5
E. provides funding for environmental projects (such as waste reduction and recycling initiatives) in the local community.	1	2	3	4	5
F. offers aid for insurance to its employees.	1	2	3	4	5
G. holds fundraising events to support poverty reduction in the community.	1	2	3	4	5
H. promotes other local small businesses by informing customers about their products.	1	2	3	4	5

Thank you for your participation

APPENDIX C: ETHICAL CLEARANCE CERTIFICATE FROM THE UNIVERSITY OF SOUTH AFRICA (UNISA)

UNISA university of south africa

UNISA DESTTL ETHICS REVIEW COMMITTEE

Date: 11/12/2017

Reference number : 2017_CEMS_ESTTL_014
Name: Samuel John Chiromo
Student number: 90198034
Staff number:

Dear Mr SJ Chiromo

Decision: Ethics Approval from 12/2017 to 12/2020

Researcher(s): Samuel John Chiromo
echirosj@unisa.ac.za
0798790265

Supervisor (s): Dr GV Nani
gweni.nani@gmail.com
+263772601202

Working title of research:

The Role of Small and Medium Enterprises(SMEs) on the Economic Development of Rustenburg, South Africa

Qualification: MCom: Business Management

Thank you for the application for research ethics clearance by the Unisa DESTTL Ethics Review Committee for the above mentioned research. Ethics approval is granted for three years.

*The **low risk application** was **reviewed** by the DESTTL Ethics Review Committee in December in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision was approved on the 11 December 2017.*

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the DESTTL Committee.

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3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No field work activities may continue after the expiry date (xxx). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

*The reference number **2017_CEMS_ESTTL_014** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,

Signature

Chair of DESTTL-RERC

E-mail: loedoc@unisa.ac.za

Tel: (012) 433-4668

Signature

Executive Dean: CEMS

E-mail: mogalmt@unisa.ac.za

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APPENDIX D: GENERAL LINEAR MODEL (GLM) RESULTS

The GLM procedure

Dependent variable: Poverty reduction

Class level information		
Class	**Levels**	**Values**
Q2_2	6	Agriculture Construction Manufacturing Mining Services Wholesale and retail

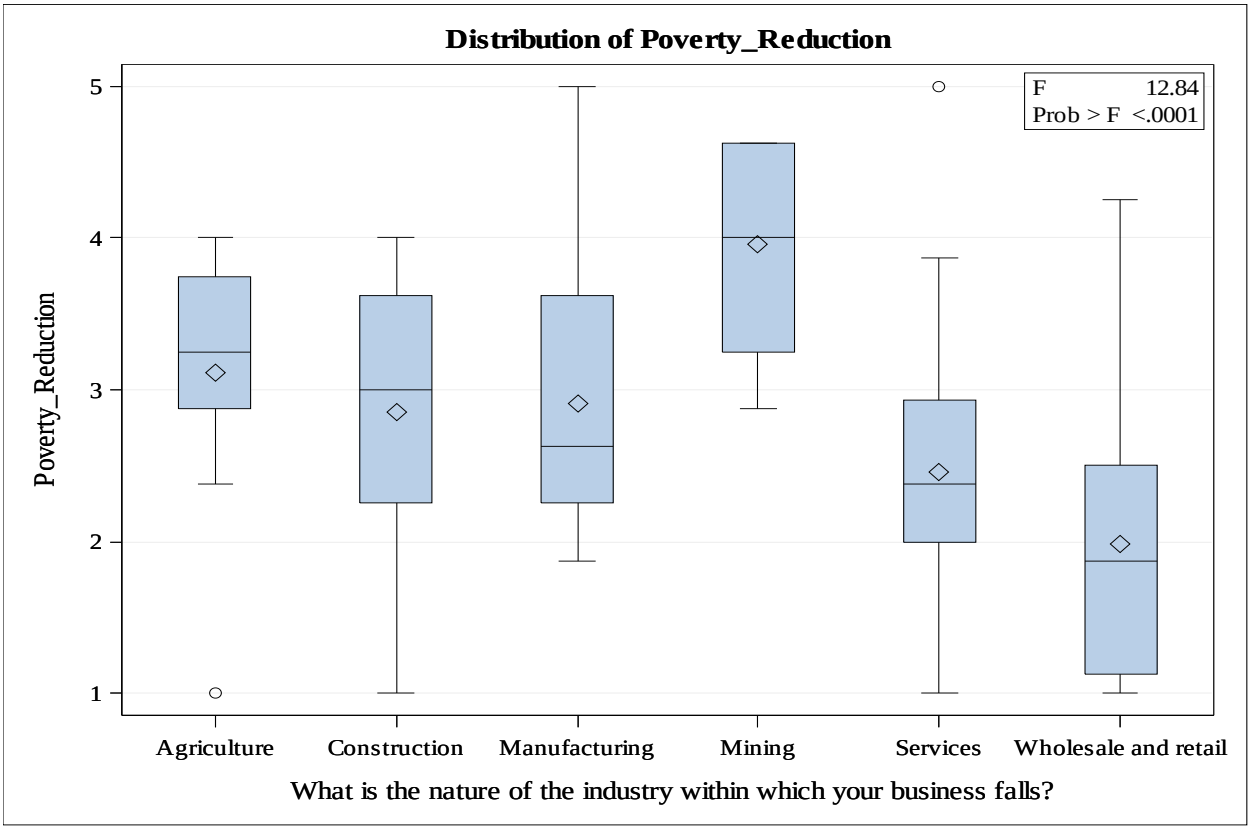
Number of observations read	182
Number of observations used	182

Source	DF	Sum of squares	Mean square	F Value	Pr > F
Model	5	44.8979462	8.9795892	12.84	<.0001
Error	176	123.0767276	0.6992996		
Corrected total	181	167.9746738			

R-square	Coeff var	Root MSE	Poverty_Reduction Mean
0.267290	32.32194	0.836241	2.587225

Parameter		Estimate		Standard error	t value	Pr > |t|
Intercept		1.982500000	B	0.11826239	16.76	<.0001
Q2_2	Agriculture	1.132884615	B	0.26034260	4.35	<.0001
Q2_2	Construction	0.876195652	B	0.21069011	4.16	<.0001
Q2_2	Manufacturing	0.924642857	B	0.18429862	5.02	<.0001
Q2_2	Mining	1.975833333	B	0.30279687	6.53	<.0001
Q2_2	Services	0.481442308	B	0.16563231	2.91	0.0041
Q2_2	Wholesale and retail	0.000000000	B	.	.	.

Dependent variable: Poverty reduction



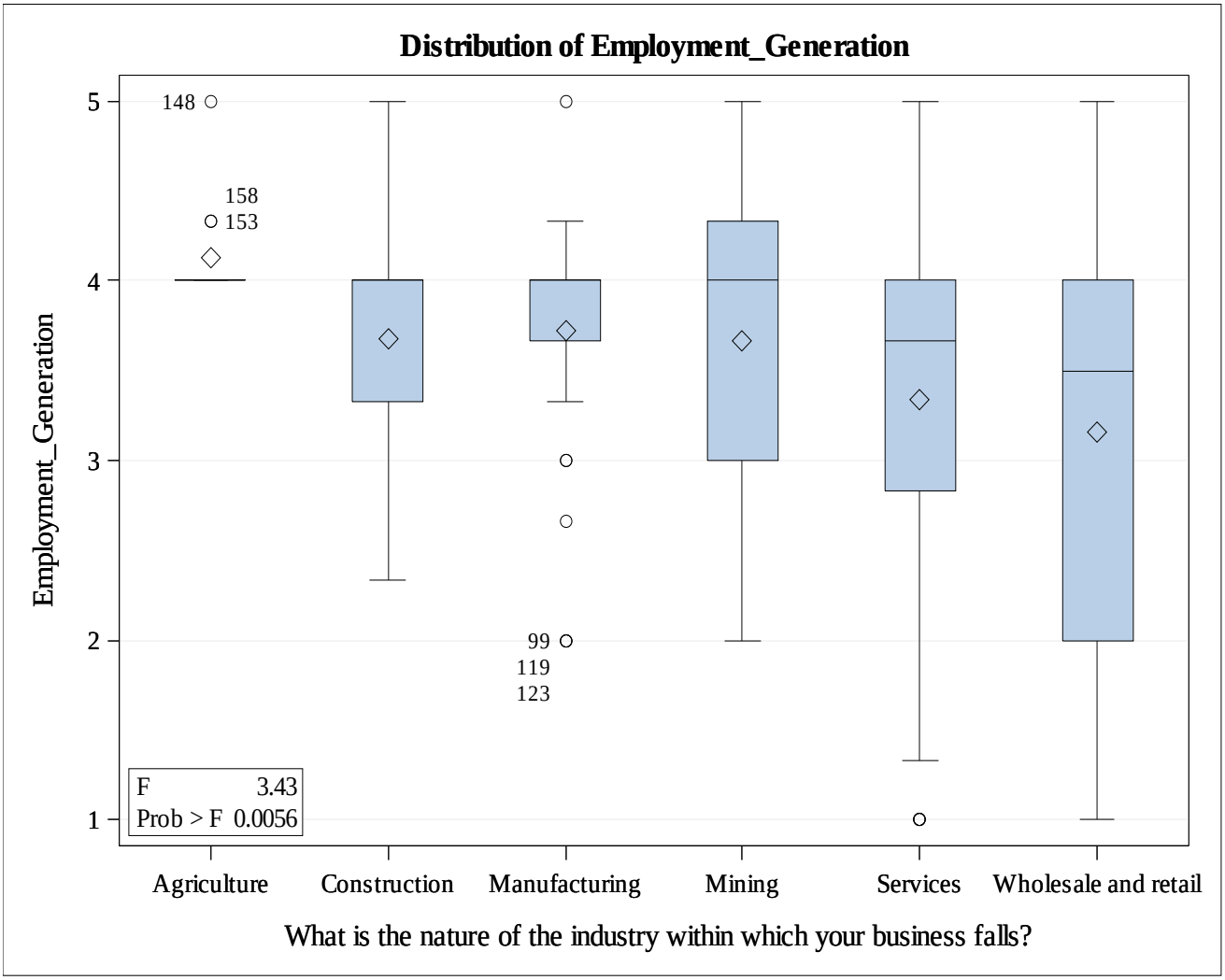
Dependent variable: Employment generation

Source	DF	Sum of squares	Mean square	F value	Pr > F
Model	5	15.1447943	3.0289589	3.43	0.0056
Error	176	155.6006270	0.8840945		
Corrected total	181	170.7454212			

R-square	Coeff var	Root MSE	Employment_Generation Mean
0.088698	27.03442	0.940263	3.478022

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		3.153333333	B	0.13297327	23.71	<.0001
Q2_2	**Agriculture**	0.974871795	B	0.29272710	3.33	0.0011
Q2_2	**Construction**	0.527826087	B	0.23689825	2.23	0.0271
Q2_2	**Manufacturing**	0.570476190	B	0.20722387	2.75	0.0065
Q2_2	**Mining**	0.513333333	B	0.34046235	1.51	0.1334
Q2_2	**Services**	0.186410256	B	0.18623562	1.00	0.3182
Q2_2	**Wholesale and retail**	0.000000000	B	.	.	.

Dependent variable: Employment generation



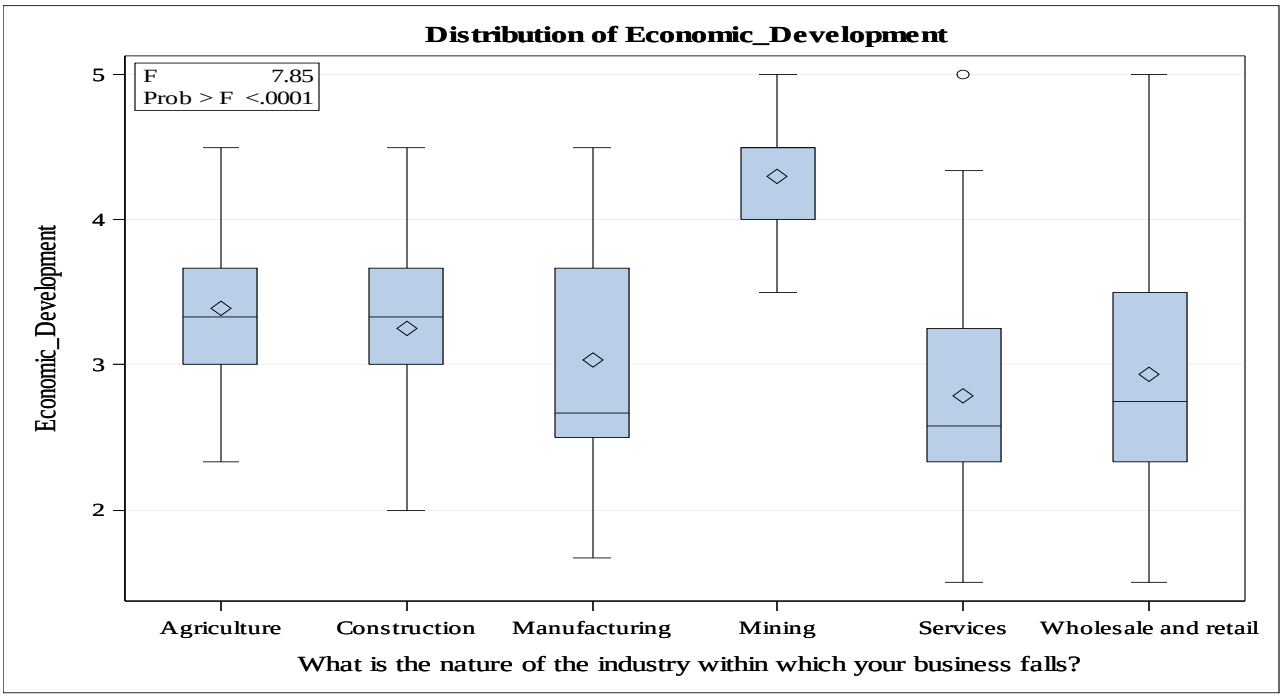
Dependent variable: Economic Development

Source	DF	Sum of squares	Mean square	F value	Pr > F
Model	5	20.6354040	4.1270808	7.85	<.0001
Error	176	92.4970746	0.5255516		
Corrected total	181	113.1324786			

R-square	Coeff var	Root MSE	Economic_Development Mean
0.182400	23.75884	0.724949	3.051282

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		2.933333333	B	0.10252332	28.61	<.0001
Q2_2	Agriculture	0.451282051	B	0.22569465	2.00	0.0471
Q2_2	Construction	0.320289855	B	0.18265021	1.75	0.0812
Q2_2	Manufacturing	0.100000000	B	0.15977106	0.63	0.5322
Q2_2	Mining	1.362962963	B	0.26249886	5.19	<.0001
Q2_2	Services	-0.144871795	B	0.14358897	-1.01	0.3144
Q2_2	Wholesale and retail	0.000000000	B	.	.	.

Dependent variable: ***Economic development***

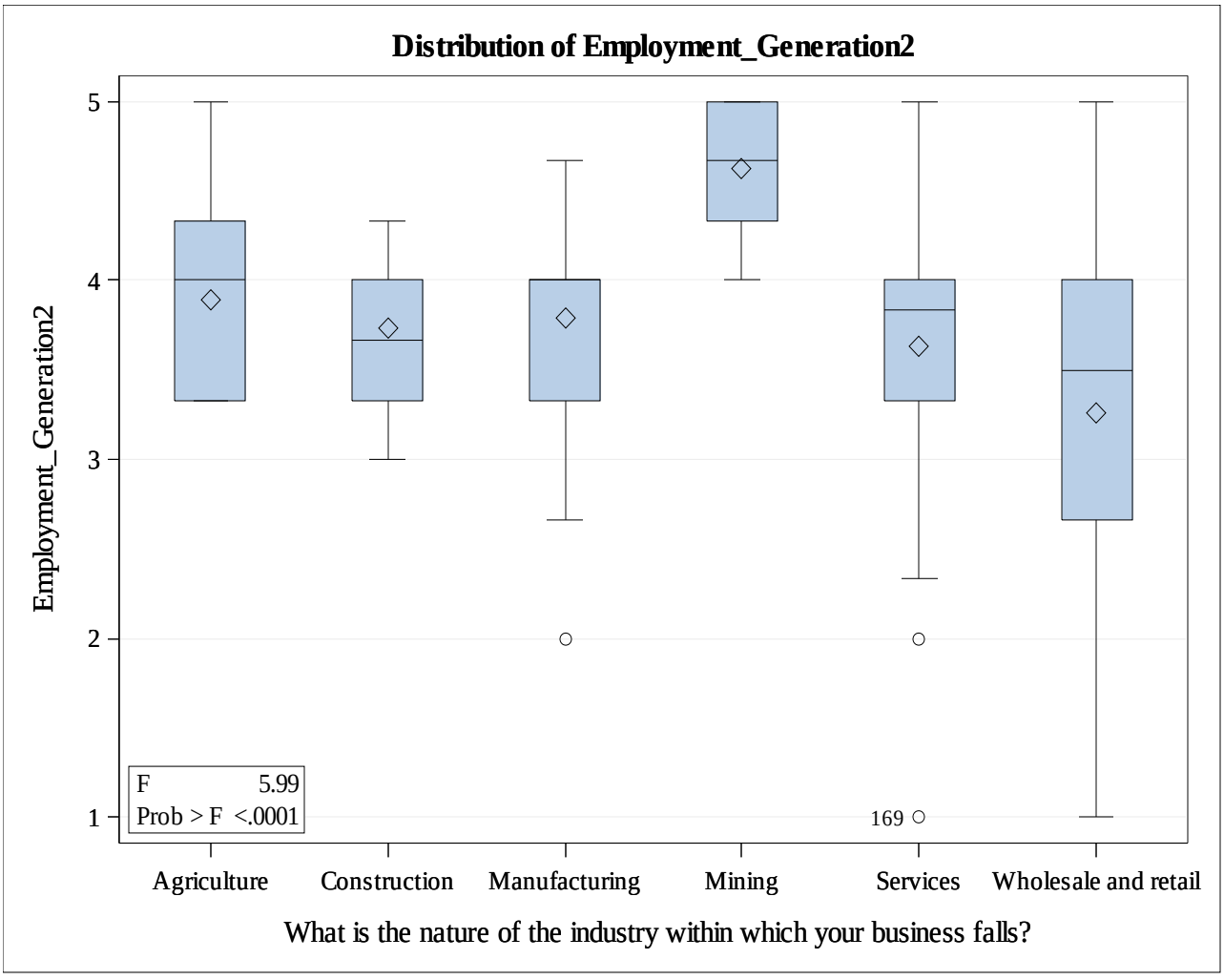


Dependent variable: Employment generation 2

Source	DF	Sum of squares	Mean square	F value	Pr > F
Model	5	17.9144007	3.5828801	5.99	<.0001
Error	176	105.2046469	0.5977537		
Corrected total	181	123.1190476			

R-square	Coeff var	Root MSE	Employment_Generation2 Mean
0.145505	21.22360	0.773145	3.642857

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		3.260000000	B	0.10933926	29.82	<.0001
Q2_2	**Agriculture**	0.637435897	B	0.24069924	2.65	0.0088
Q2_2	**Construction**	0.479130435	B	0.19479313	2.46	0.0149
Q2_2	**Manufacturing**	0.530476190	B	0.17039293	3.11	0.0022
Q2_2	**Mining**	1.369629630	B	0.27995026	4.89	<.0001
Q2_2	**Services**	0.374615385	B	0.15313503	2.45	0.0154
Q2_2	**Wholesale and retail**	0.000000000	B	.	.	.


Distribution of Employment_Generation2
Employment_Generation2
5
4
3
2
1
F 5.99
Prob > F <.0001
169
Agriculture
Construction
Manufacturing
Mining
Services
Wholesale and retail
What is the nature of the industry within which your business falls?

Tukey's studentised range (HSD) test for poverty reduction

Note: This test controls the type 1 experiment wise error rate.

Alpha	0.05
Error degrees of freedom	176
Error mean square	0.6993
Critical value of studentised range	4.07488

Comparisons significant at the 0.05 level are indicated by *.**				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Mining - Agriculture	0.8429	-0.2019	1.8878	
Mining - Manufacturing	1.0512	0.1507	1.9517	***
Mining - Construction	1.0996	0.1523	2.0470	***
Mining - Services	1.4944	0.6245	2.3643	***
Mining - Wholesale and retail	1.9758	1.1034	2.8483	***
Agriculture - Mining	-0.8429	-1.8878	0.2019	
Agriculture - Manufacturing	0.2082	-0.5744	0.9909	
Agriculture - Construction	0.2567	-0.5794	1.0928	
Agriculture - Services	0.6514	-0.0957	1.3986	
Agriculture - Wholesale and retail	1.1329	0.3827	1.8830	***
Manufacturing - Mining	-1.0512	-1.9517	-0.1507	***
Manufacturing - Agriculture	-0.2082	-0.9909	0.5744	
Manufacturing - Construction	0.0484	-0.5983	0.6952	
Manufacturing - Services	0.4432	-0.0836	0.9700	
Manufacturing - Wholesale and retail	0.9246	0.3936	1.4557	***
Construction - Mining	-1.0996	-2.0470	-0.1523	***
Construction - Agriculture	-0.2567	-1.0928	0.5794	
Construction - Manufacturing	-0.0484	-0.6952	0.5983	

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	Difference between means	Simultaneous 95% confidence limits		
Construction - Services	0.3948	-0.2086	0.9981	
Construction - Wholesale and retail	0.8762	0.2691	1.4833	***
Services - Mining	-1.4944	-2.3643	-0.6245	***
Services - Agriculture	-0.6514	-1.3986	0.0957	
Services - Manufacturing	-0.4432	-0.9700	0.0836	
Services - Construction	-0.3948	-0.9981	0.2086	
Services - Wholesale and retail	0.4814	0.0042	0.9587	***
Wholesale and retail - Mining	-1.9758	-2.8483	-1.1034	***
Wholesale and retail - Agriculture	-1.1329	-1.8830	-0.3827	***
Wholesale and retail - Manufacturing	-0.9246	-1.4557	-0.3936	***
Wholesale and retail - Construction	-0.8762	-1.4833	-0.2691	***
Wholesale and retail - Services	-0.4814	-0.9587	-0.0042	***

Tukey's studentised range (HSD) test for employment generation

Note: This test controls the type 1 experiment wise error rate.

Alpha	0.05
Error degrees of freedom	176
Error mean square	0.884094
Critical value of studentised range	4.07488

Comparisons significant at the 0.05 level are indicated by *.**				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Agriculture - Manufacturing	0.4044	-0.4756	1.2844	
Agriculture - Construction	0.4470	-0.4930	1.3871	
Agriculture - Mining	0.4615	-0.7133	1.6363	
Agriculture - Services	0.7885	-0.0516	1.6286	
Agriculture - Wholesale and retail	0.9749	0.1314	1.8183	***
Manufacturing - Agriculture	-0.4044	-1.2844	0.4756	
Manufacturing - Construction	0.0427	-0.6846	0.7699	
Manufacturing - Mining	0.0571	-0.9554	1.0697	
Manufacturing - Services	0.3841	-0.2083	0.9764	
Manufacturing - Wholesale and retail	0.5705	-0.0266	1.1676	
Construction - Agriculture	-0.4470	-1.3871	0.4930	
Construction - Manufacturing	-0.0427	-0.7699	0.6846	
Construction - Mining	0.0145	-1.0507	1.0797	
Construction - Services	0.3414	-0.3370	1.0199	
Construction - Wholesale and retail	0.5278	-0.1548	1.2104	
Mining - Agriculture	-0.4615	-1.6363	0.7133	
Mining - Manufacturing	-0.0571	-1.0697	0.9554	
Mining - Construction	-0.0145	-1.0797	1.0507	

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	Difference between means	Simultaneous 95% confidence limits		
Mining - Services	0.3269	-0.6512	1.3050	
Mining - Wholesale and retail	0.5133	-0.4677	1.4943	
Services - Agriculture	-0.7885	-1.6286	0.0516	
Services - Manufacturing	-0.3841	-0.9764	0.2083	
Services - Construction	-0.3414	-1.0199	0.3370	
Services - Mining	-0.3269	-1.3050	0.6512	
Services - Wholesale and retail	0.1864	-0.3502	0.7230	
Wholesale and retail - Agriculture	-0.9749	-1.8183	-0.1314	***
Wholesale and retail - Manufacturing	-0.5705	-1.1676	0.0266	
Wholesale and retail - Construction	-0.5278	-1.2104	0.1548	
Wholesale and retail - Mining	-0.5133	-1.4943	0.4677	
Wholesale and retail - Services	-0.1864	-0.7230	0.3502	

Tukey's studentised range (HSD) test for economic development

Note: This test controls the type 1 experiment wise error rate.

Alpha	0.05
Error degrees of freedom	176
Error mean square	0.525552
Critical value of studentised range	4.07488

Comparisons significant at the 0.05 level are indicated by *.**				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Mining - Agriculture	0.9117	0.0059	1.8175	***
Mining - Construction	1.0427	0.2214	1.8640	***
Mining - Manufacturing	1.2630	0.4823	2.0437	***
Mining - Wholesale and retail	1.3630	0.6066	2.1193	***
Mining - Services	1.5078	0.7537	2.2620	***
Agriculture - Mining	-0.9117	-1.8175	-0.0059	***
Agriculture - Construction	0.1310	-0.5938	0.8558	
Agriculture - Manufacturing	0.3513	-0.3272	1.0297	
Agriculture - Wholesale and retail	0.4513	-0.1990	1.1016	
Agriculture - Services	0.5962	-0.0516	1.2439	
Construction - Mining	-1.0427	-1.8640	-0.2214	***
Construction - Agriculture	-0.1310	-0.8558	0.5938	
Construction - Manufacturing	0.2203	-0.3404	0.7810	
Construction - Wholesale and retail	0.3203	-0.2060	0.8466	
Construction - Services	0.4652	-0.0579	0.9882	
Manufacturing - Mining	-1.2630	-2.0437	-0.4823	***
Manufacturing - Agriculture	-0.3513	-1.0297	0.3272	
Manufacturing - Construction	-0.2203	-0.7810	0.3404	

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	Difference between means	Simultaneous 95% confidence limits		
Manufacturing - Wholesale and retail	0.1000	-0.3604	0.5604	
Manufacturing - Services	0.2449	-0.2118	0.7016	
Wholesale and retail - Mining	-1.3630	-2.1193	-0.6066	***
Wholesale and retail - Agriculture	-0.4513	-1.1016	0.1990	
Wholesale and retail - Construction	-0.3203	-0.8466	0.2060	
Wholesale and retail - Manufacturing	-0.1000	-0.5604	0.3604	
Wholesale and retail - Services	0.1449	-0.2689	0.5586	
Services - Mining	-1.5078	-2.2620	-0.7537	***
Services - Agriculture	-0.5962	-1.2439	0.0516	
Services - Construction	-0.4652	-0.9882	0.0579	
Services - Manufacturing	-0.2449	-0.7016	0.2118	
Services - Wholesale and retail	-0.1449	-0.5586	0.2689	

Tukey's studentised range (HSD) test for employment generation 2

Note: This test controls the type 1 experiment wise error rate.

Alpha	0.05
Error degrees of freedom	176
Error mean square	0.597754
Critical value of studentised range	4.07488

Comparisons significant at the 0.05 level are indicated by *.**				
Q2_2 Comparison	**Difference between means**	**Simultaneous 95% confidence limits**		
Mining - Agriculture	0.7322	-0.2338	1.6982	
Mining - Manufacturing	0.8392	0.0066	1.6717	***
Mining - Construction	0.8905	0.0146	1.7664	***
Mining - Services	0.9950	0.1907	1.7993	***
Mining - Wholesale and retail	1.3696	0.5630	2.1763	***
Agriculture - Mining	-0.7322	-1.6982	0.2338	
Agriculture - Manufacturing	0.1070	-0.6166	0.8305	
Agriculture - Construction	0.1583	-0.6147	0.9313	
Agriculture - Services	0.2628	-0.4280	0.9536	
Agriculture - Wholesale and retail	0.6374	-0.0561	1.3310	
Manufacturing - Mining	-0.8392	-1.6717	-0.0066	***
Manufacturing - Agriculture	-0.1070	-0.8305	0.6166	
Manufacturing - Construction	0.0513	-0.5466	0.6493	
Manufacturing - Services	0.1559	-0.3312	0.6429	
Manufacturing - Wholesale and retail	0.5305	0.0395	1.0214	***
Construction - Mining	-0.8905	-1.7664	-0.0146	***
Construction - Agriculture	-0.1583	-0.9313	0.6147	
Construction - Manufacturing	-0.0513	-0.6493	0.5466	

Comparisons significant at the 0.05 level are indicated by ***.				
Q2_2 Comparison	Difference between means	Simultaneous 95% confidence limits		
Construction - Services	0.1045	-0.4533	0.6624	
Construction - Wholesale and retail	0.4791	-0.0821	1.0404	
Services - Mining	-0.9950	-1.7993	-0.1907	***
Services - Agriculture	-0.2628	-0.9536	0.4280	
Services - Manufacturing	-0.1559	-0.6429	0.3312	
Services - Construction	-0.1045	-0.6624	0.4533	
Services - Wholesale and retail	0.3746	-0.0666	0.8159	
Wholesale and retail - Mining	-1.3696	-2.1763	-0.5630	***
Wholesale and retail - Agriculture	-0.6374	-1.3310	0.0561	
Wholesale and retail - Manufacturing	-0.5305	-1.0214	-0.0395	***
Wholesale and retail - Construction	-0.4791	-1.0404	0.0821	
Wholesale and retail - Services	-0.3746	-0.8159	0.0666	

The GLM procedure

Level of Q2_2	N	Poverty_Reduction		Employment_Generation		Economic_Development	
		Mean	Std dev	Mean	Std dev	Mean	Std dev
Agriculture	13	3.11538462	0.82041265	4.12820513	0.28990616	3.38461538	0.66103390
Construction	23	2.85869565	0.84131960	3.68115942	0.59014004	3.25362319	0.63934461
Manufacturing	35	2.90714286	0.82434402	3.72380952	0.66904338	3.03333333	0.72625821
Mining	9	3.95833333	0.67892378	3.66666667	1.05409255	4.29629630	0.49143906
Services	52	2.46394231	0.79879525	3.33974359	1.03214223	2.78846154	0.74762907
Wholesale and retail	50	1.98250000	0.90456961	3.15333333	1.18227652	2.93333333	0.78101045

Level of Q2_2	N	Employment_Generation2	
		Mean	Std Dev
Agriculture	13	3.89743590	0.51612185
Construction	23	3.73913043	0.37546633
Manufacturing	35	3.79047619	0.57215174
Mining	9	4.62962963	0.42309851
Services	52	3.63461538	0.79007905
Wholesale and retail	50	3.26000000	1.05471622

APPENDIX D: PEARSON CORRELATION TEST RESULTS

3 Variables:	Poverty_Reduction Economic_Development Employment_Generation

Pearson correlation coefficients, N = 182 Prob > |r| under H0: Rho=0				
Variables	**Poverty reduction**	**Employment generation**	**Economic development**	**Employment generation**
Poverty_Reduction	1.00000	0.39534 <.0001	0.64349 <.0001	0.40942 <.0001
Economic_Development	0.64349 <.0001	0.33884 <.0001	1.00000	0.48579 <.0001
Employment_Generation	0.40942 <.0001	0.47256 <.0001	0.48579 <.0001	1.00000

APPENDIX: LANGUAGE EDITING CERTIFICATE

Jackie Viljoen
Language Editor and Translator
16 Bergzicht Gardens
Fijnbos Close
STRAND 7140

Accredited member of the South African Translators' Institute
No APSTrans 1000017
Member of the Professional Editors' Group (PEG)
Member of Safrea (No. SAF03316)

☎ +27+21-854 5095 082 783 0263 086 585 3740
Postal address: 16 Bergzicht Gardens, Fijnbos Close, STRAND 7140 South Africa

DECLARATION

I hereby certify that the dissertation by **Samuel John Chiromo** was properly language edited but without viewing the final version.

The track changes function was used and the author was responsible for accepting the editor's changes and for finalising the reference list.

Title of dissertation:

PERCEPTIONS ON THE ROLE OF LOCALLY OWNED SMALL, MEDIUM AND MICRO ENTERPRISES IN THE ECONOMIC DEVELOPMENT OF RUSTENBURG, SOUTH AFRICA

The editor did not write or rewrite any part of the dissertation on behalf of the client, including passages that may have been plagiarised. The academic content is the sole responsibility of the client as author of the work. The editor could not and did not test definitively for plagiarism, nor is there any explicit or implicit guarantee that the content that was edited contained no material used without consent. The editor accepts no responsibility for any failure on examination of the dissertation by the university.

JACKIE VILJOEN
Strand
South Africa
09 November 2018